

THE INFLUENCES OF FAMILY BACKGROUND VARIABLES VERSUS SUBJECT
VARIABLES ON THE SEX ROLES, SEX ROLE STEREOTYPES AND
SEX ROLE ORIENTATIONS OF COLLEGE STUDENTS

By

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The purpose of this investigation is to explore three areas of sex role research. The first goal is to document whether personal sex roles, sex role stereotypes and sex role orientations still exist. The second goal is to explore the effects of family background variables on the development of personal sex roles. The third goal is to explore discrepancies in sex role stereotype ratings and gender differences in sex role orientation ratings.

The subjects consisted of 191 undergraduate college students. Each subject was first administered a background questionnaire followed by five administrations of the Sex Role Orientation Scale (SROS). Each subject first answered the SROS based on his or her own beliefs. The next four administrations were counterbalanced and requested responses

for male and female sex role stereotypes, and male and female sex role orientations.

The results of the investigation demonstrated the continued existence of personal sex roles, sex role stereotypes, and sex role orientations. Each sex role area demonstrated the expected sex difference, with male ratings indicating more traditional beliefs than those of females.

The results also indicated that present social roles outweigh the impact of previous family background variables. Present educational level, anticipated final educational level, current level of religiosity and gender were all influential variables. Parental educational level, maternal employment, divorce and religious affiliation all showed insignificant relationships to sex roles.

Sex role stereotypes were not found to reflect the self-ratings of either males or females. Male stereotypes were rated more traditionally than male self-ratings indicated, while females were also rated more traditionally, but to a lesser degree. Sex role orientations were not rated differently by males and females. Both sexes rated male sex role orientations more traditionally than female sex role orientations.

The results were interpreted within the social-role theoretical framework. Family background variables showed little relationship to current sex roles, while present social situations were related to current sex roles. Thus, support for social-role theory was deemed appropriate.

CHAPTER 1 INTRODUCTION

Introduction to Sex Role Research

Sex roles are the unwritten yet well-defined rules that are deemed appropriate by society to guide male/female behavior. How these appropriate standards of behavior are acquired has been under systematic investigation by developmental psychologists and other scientists since the early 1960s. The pervasiveness of sex roles was described by Mussen (1969), who stated that "no other social role directs more of an individual's overt behavior, emotional reaction, cognitive functioning, covert attitudes, and general psychological and social adjustment" (p. 707). The development of sex roles, then, plays an important part in the overall development of the individual and is deemed worthy of investigation.

The importance of sex roles and their accompanying stereotypes should not be underestimated. A recent Supreme Court ruling (Price Waterhouse v. Hopkins, 1989) stated that the practice of sex role stereotyping may be used as evidence in sex discrimination suits. The case involved a female who claimed that she was denied a partnership in an accounting firm because she did not fit her sex role

stereotype. The Supreme Court ruled in her favor. Sex role stereotyping, then, may be used in court as evidence of discrimination. Hence the documentation of the continuing existence of sex roles and their accompanying stereotypes is imperative.

The volume of information on sex roles has grown steadily since the onset of systematic empirical investigation. According to D. N. Ruble and T. L. Ruble (1982), the 1965 Psychological Abstracts reported 50 studies dealing with sex role stereotypes. By the 1975 issue, Psychological Abstracts reported over 500 articles. Computer searches employing the "PsycLit" program listed over 1,000 references in English under the sex role attitudes search for the time period of January 1983 through June 1989. Furthermore, the most recent Handbook of Child Psychology chapter on sex typing by Aletha Huston (1983) listed over 500 references. In 1975 the premier issue of the journal Sex Roles appeared. Now the area of sex roles has an entire publication devoted to the empirical investigations of sex typing and its ramifications. Most recently, the cover of the May 28th, 1990, issue of Newsweek and the lead story were devoted to explaining sex differences between boys and girls. Thus, there is a proliferation of information available to the scientific community as well as to the lay public on the topic of sex roles.

A rather startling conclusion of this expanse of scientific research is that sex role stereotypes are still very dominant and that they have changed so very little over the last 20 plus years of study. As examples of this lack of change, Lewin and Tragos (1987) found sex role stereotyping to be as significant in 1982 as it was in 1956 among adolescent males and females. The work of T. L. Ruble (1983) also concluded that sex role stereotypes are extensive. T. L. Ruble employed the 54-item Personal Attributes Questionnaire (PAQ). The PAQ was developed by Spence, Helmreich and Stapp (1974) and has been employed in numerous empirical investigations. T. L. Ruble found statistically significant differences on 53 of the 54 measures when subjects rated the "typical" male and female. The only variable not distinguishing males from females was intelligence.

In general, stereotypical males are rated as instrumental, meaning they are competent, self-assured, independent and rational. Stereotypical females are labeled as expressive, which includes such traits as emotional, caring, gentle and devoted to others above self. These are the same traits that were ascribed to males and females when the trait approach to stereotyping was begun by Rosenkrantz, Vogel, Bee, Broverman, and Broverman in 1968. The persistence of sex role stereotypes despite the radical political and social activism of the 1970s and early 1980s

is proof of how deeply society has ingrained these traditions.

Development of Sex Roles

Due to the vast influence that sex roles impart, it is not surprising that the indoctrination into the appropriate sex role frequently begins only moments after birth when the parents are informed first thing that they are the proud parents of either a boy or a girl (Shaffer, 1985). The child is often then fitted with an "appropriately" pink or blue wrist bracelet with a name identification and then wrapped in either a pink or blue blanket. Since socialization into the appropriate sex role begins so early, it is not surprising that stereotypical sex role behavior is exhibited by children as young as two years of age (Lewis & Brooks-Gunn, 1979).

Personal sex roles do not develop in a continuous, monotonic fashion, but rather fluctuate across the life span. In childhood they are viewed as inflexible, immutable rules. By middle childhood increased flexibility as well as increased pervasiveness of sex roles is evident (Marantz & Mansfield, 1977). During adolescence it appears that the reformulation of the self-concept once again puts the individual's sex role in a state of flux (Streitmatter, 1985). Once adulthood has been attained, sex roles appear to reflect the social roles that the individual is currently

occupying, for example, career woman versus housewife (Eagly, 1987; England, 1988). The overall findings on sex roles and aging, however, are not consistent. Some studies report that older adults are more traditional (e.g., Dambrot, Papp, & Whitmore, 1984; Swatos & McCauley, 1984), while other studies indicate they are less traditional (e.g., Urberg, 1979). Thus personal sex roles develop early in life and are a life long but inconsistent influence on social behavior.

Family Background Variables

In addition to the social roles that an individual occupies (especially those in adulthood), the social roles and environmental influences surrounding the individual also appear to impact sex role development. While peers, teachers and school environments have an impact, the majority of the work done on environmental influences has examined the impact of family members on the developing child due to the pervasiveness of family influence as compared to other social institutions. Major areas of research have included the influence of parental and personal educational attainments, the effects of maternal employment, the impact of divorce, and the differential effects of religion. Numerous studies have been completed in each of these areas. Most studies found effects on sex role development such that traditional family styles, lower

levels of education, and increased religiosity were correlated with more traditional sex roles. Thus, the family environment has been found to influence the development of sex typing.

Sex Role Stereotype and Sex Role Orientation Ratings

Sex roles are influential in our perceptions of others in that we all engage in sex role stereotyping of others as well as ourselves. In fact, Eagly (1987) has suggested that stereotypes in general are the basis of person perception. Fabes and Laner (1986) agree with Eagly and go one step further by stating that sex role stereotypes guide our individual interactions with others. Hence an understanding of how members of the opposite sex are perceived would be of value in interpersonal experiences. If men and women hold discrepant sex role stereotypes of each other, then interpersonal interactions will be ripe for misunderstanding and misinterpretation. Therefore, it is important to evaluate the commonly held sex role stereotypes of each gender.

Beyond sex role stereotypes, which are perceptions of "typical" individuals, is the area of sex role orientations. Sex role orientations reflect opinions about "ideal" individuals (Brogan & Kutner, 1976; T. L. Ruble, 1983). As is the case with stereotypes, ideal opinions are also of importance in dealing with members of the opposite sex as

they once again influence our actions and behaviors. Individuals respond in certain situations based on what they believe the appropriate response to be. For example, in studies involving interactions between members of both sexes, the level of aggression, compassion or submission to leadership is frequently a result of the sex of the partner or opponent (Spence & Helmreich, 1980). The problem with sex role orientations is that an overview of studies in this area indicates no consensus regarding what traits and behaviors are considered ideal. Studies also suggest (Deutsch & Gilbert, 1976; McPherson & Spetrino, 1983; Scher, 1984) that orientation ratings vary based upon the sex of the rater. Hence, continued investigation into the area of sex role orientations is warranted.

Plan of Study

The purpose of this investigation is threefold. The first goal is to document the continued existence of personal sex roles, sex role stereotypes and sex role orientations. The second goal of this investigation is to explore the effects of family background variables on the development of personal sex roles. The last goal is to explore the discrepancy in sex role stereotype ratings and to explore gender differences in sex role orientation ratings.

Despite recent political and social changes, the scientific literature indicates that sex roles, sex role stereotypes and sex role orientations continue to exist, and show little change over the past 20 years of investigation. The vast majority of the studies that document this finding has employed sex role measures that assess psychological and personality traits (e.g., the PAQ). This study will employ a sex role measure that assesses attitudes toward specific behaviors, the Sex Role Orientation Scale (SROS, Brogan & Kutner, 1976). Instead of simply continuing the documentation of the existence of sex roles, sex role stereotypes and orientations, this study will expand our knowledge by moving closer to the behavioral domain.

As previously stated, the second goal of this investigation is to explore the effects of differing family background variables on the development of personal sex roles. The effects of parental and personal education, maternal employment, parental marital status and religious affiliation and practice will all be investigated. Again, the employment of a sex role measure that assesses attitudes toward behavior will expand the current literature. Additionally, it is possible that previously documented familial effects will not be replicated due to changes that have occurred over the last 20 years (e.g., increased educational levels, increased maternal employment, and increased divorce rates). Thus, continued investigation of

the effects of family background variables will be undertaken.

The third area of investigation deals with sex role stereotypes and sex role orientations. If there are discrepancies between personal sex roles and either stereotypes or orientations, then miscommunications in interpersonal interactions are possible. Additionally, ratings of sex role orientations have been found to vary depending upon the sex of the rater. It is likely that measurement of behavioral attitudes rather than traits will be of more benefit when dealing with these areas due to the specificity of behavioral attitudes versus the abstractness of traits.

CHAPTER 2 LITERATURE REVIEW

This investigation explores personal sex roles, sex role stereotypes, and sex role orientations. The development of sex roles has been well documented. Much of this attention has focused on family background as a cause of differential sex role development. Sex role stereotypes have been the most thoroughly researched, while sex role orientations have been only recently addressed. This section will begin with a look at the methodology of sex role research. The development of sex roles and sex role theoretical formulations follows. The impact of family background on the development of sex roles will then be examined, followed by an examination of discrepancies in sex role stereotype ratings and gender differences in sex role orientation ratings. The section will close with a statement of the hypotheses under investigation.

Sex Role Research with Adults

As noted, the research on sex roles is extensive. This section will attempt to summarize many of the ideas, empirical results and difficulties associated with research in this field. The first area to be addressed will be the

definition of terms. The next area to be discussed will be the differing measurement scales in use, followed by the overall empirical findings of research in the area. Finally, the methodological problems associated with the area will be discussed.

Definitions

Before investigating the area of sex roles, it is necessary to define and clarify several of the terms now in use. Due to the connotations associated with the use of the word "sex," some investigators have determined that the use of the word "gender" is more appropriate (e.g., Stevens, Barton & Gardner, 1983). However, the preponderance of literature in the area employs the term "sex." These terms will be used synonymously in this work due to their interchangeable usage in the literature.

There are several different terms utilized in the sex role literature, each with a specific meaning. To begin with, sex typing is the overall "process by which children acquire the values, motives, and behaviors viewed as appropriate to either males or females in a specific culture" (Hetherington & Parke, 1986, p. 623). It is a developmental process that begins shortly after birth and continues throughout life as social roles change across the life span.

The terms sex role identity and sex role are interdependent. Sex role identity "has a private connotation. It refers to the individual's perception of the self as relatively masculine or feminine in characteristics, capabilities and behaviors" (Berk, 1989, p. 551). Sex role identity is a personal perception of oneself compared to societal standards of masculinity and femininity. Thus an individual's sex role identity is a hypothetical psychological construct that extends beyond the "simple cognitive awareness of his or her biological sex to psychologically identifying with it" (Pleck, 1981, p. 12). Sex roles are the public face of one's sex role identity. Sex roles are "everything that a person says and does, to indicate to others or to the self the degree that one is either male, or female" (Money & Ehrhardt, 1972, p. 4). So then, sex role identity "is the private experience of sex-role, and sex-role is the public expression of sex-role identity" (Money & Ehrhardt, 1972, p. 4).

Sex role stereotype is the most commonly researched term in the literature. Yet Ashmore and Del Boca (1979) found that a conceptual definition for sex role stereotype was lacking in most research studies. The definition put forth by these authors includes four characteristics. First of all, a sex role stereotype is regarded as a cognitive construct. It is a perception, an expectation or a judgment. Second, a sex role stereotype is a collection of

beliefs or judgments, a set of cognitions that are interrelated, and so grouped together. Third, sex role stereotypes are beliefs about the psychological make-up, the personalities or the traits that men and women possess. Finally, in order to be a stereotype, it must be a set of beliefs that are shared by members of some group. Putting these four characteristics together, Ashmore and Del Boca's definition of sex role stereotype would be "the structured set of beliefs about the personal attributes of women and of men" (p. 222).

A newer term being utilized in the research is that of sex role orientation. The major proponents of the usage of this term are Brogan and Kutner (1976). They define sex role orientation as "attitudes about what is 'right' for males and females to do" (p. 32). Sex role orientation has a moral aspect, how things "should be," versus the sex role stereotype which is merely a reflection of how things are. Thus, when requesting subjects to rate a male or female based on how typical they are, the request is for a stereotypical reply. If the request is to rate the subject based on how males or females should behave, the request is for a sex role orientation response. T. L. Ruble (1983) also makes this distinction; however, instead of employing the term orientation, he refers to "should behavior" or ideal/desirable behavior as sex role attitudes. Pleck (1981) also concurs with this usage; however, he too employs

a different term. Pleck refers to ideal behavior as sex role norms. Thus, there are several different terms in common usage in the field at present. This study will employ the term sex role orientation to reflect ideal/desirable sex role attitudes due to the usage of Brogan and Kutner's Sex Role Orientation Scale as the study's measurement tool.

Original work on sex typing assumed that individuals over the course of development became either masculine or feminine in their sex role adoption. Sex roles were viewed as containing bipolar traits. Sandra Bem (1974) took exception to this conceptual viewpoint and hypothesized androgynous sex typing. The term androgyny is Greek, with "andro" meaning male, and "gyne" meaning female. The androgynous individual, then, has some masculine and some feminine traits, making the individual situationally flexible. Sex role traits then are no longer considered to be bipolar; rather, they are considered independent traits that can be clustered to form the individual's sex role identity as each person desires. Androgynous individuals can be both instrumental and expressive; the categories are not mutually exclusive.

The Measurement of Sex Roles

Just as there are numerous terms and a plethora of studies, there are also several measurement tools available

to evaluate the extent of sex role stereotypes and sex role orientations. An overview of the literature, however, indicates that only five of these measures are used with any regularity. An examination of these five instruments will be undertaken in order to familiarize the reader with the design and purpose of each. Examination of the three measures that test sex role traits will be undertaken first. Examination of the two measures that test for sex role behaviors will follow. Limitations and problems associated with sex role measurement tools will be discussed under the section on methodological problems.

The two sex role measures most commonly used are actually the same instrument, one merely a revision of the other. Systematic investigation of sex roles began with the advent of the Sex Role Stereotype Questionnaire (SRSQ) devised by Rosenkrantz et al. (1968). The SRSQ was devised to assess the psychological traits and sex role behaviors of males and females. The questionnaire contained 122 trait descriptions listed in bipolar form. Raters were then asked "to indicate the extent to which each item characterized an adult man (masculinity response), and an adult woman (femininity response)" (Broverman et al., 1972, p. 62). Initial and subsequent usage of the SRSQ has shown that male and females do differ substantially in their assigned sex role stereotypes, and furthermore, agreement between males and females concerning the assignment of these traits is

extremely good (correlations of $r = .95$ for feminine traits, and $r = .96$ for masculine traits as reported by Rosenkrantz et al.).

The SRSQ was revised by Spence et al. (1974). The scale was narrowed from 122 items down to 55 and renamed the Personal Attributes Questionnaire (PAQ). The 55-item listing still required the subjects to rate male and female traits on a bipolar scale. Spence and her colleagues then broke down the PAQ into three subscales: "Male-valued (mean ratings for the ideal man and woman both fell towards the stereotypic masculine pole), Female-valued (both towards the stereotypic feminine pole), and Sex-specific (ideal man and woman fell toward different poles)" (p. 44). The authors concluded that masculinity and femininity were separate dimensions. The femininity scale reflected an expressive character, high in warmth, caring and emotionality. The masculinity scale reflected an instrumental character, high in competence, independence and aggressiveness.

In opposition to the notion that masculinity and femininity are bipolar opposites, Bem (1974) created a measurement device based on the hypothesis that a person need not be either masculine or feminine, but could display traits of both, which is labeled androgynous. Bem's conception of sex roles, then, reflected masculinity and femininity as independent, not mutually exclusive. It is possible to be both instrumental and expressive. In fact,

Bem suggested that the androgynous person would demonstrate greater situational flexibility and so be more likely to display superior mental health.

The Bem Sex Role Inventory (BSRI, Bem, 1974) is made up of 60 items, 20 masculine, 20 feminine and 20 neutral. Subjects are asked to rate themselves on each item using a 7-point Likert-type scale. Total scores are tallied for three scales, the masculinity scale, the femininity scale, and the androgyny scale.

The Masculinity and Femininity scores indicate the extent to which a person endorses masculine and feminine personality characteristics as self-descriptive. The Androgyny score reflects the relative amounts of masculinity and femininity that the person includes in his or her self-descriptions. (Bem, 1974, p. 158)

Therefore, an androgynous person endorses both masculine and feminine traits to equal degrees in their self-descriptions. This scale is widely used in the literature.

Another earlier creation by Spence and Helmreich (1972; Spence, Helmreich & Stapp, 1973) was the Attitudes toward Women Scale (AWS). The purpose of this scale was to assess the "appropriate" rights and assigned roles of women today. The original scale contained 55 items and was rated (from 0 to 3) in terms of amount of agreement. High scores reflect a profeminist attitude. The AWS can be separated into six subscales based on attitude content. The subscales reflect attitudes toward "1) vocational, educational and intellectual roles; 2) freedom and independence; 3) dating,

courtship, and etiquette; 4) drinking, swearing, and dirty jokes; 5) sexual behavior; and, 6) marital relationships and obligations" (Borges, Levine & Naylor, 1982, p. 408). This scale has been revised into a shorter form (Spence et al., 1973), and both scales continue to be utilized in sex role research.

The most recent scale in use is the Sex Role Orientation Scale (SROS) by Brogan and Kutner (1976). This scale was devised in order to investigate the "normative prescriptions for the behavior of males and females" (p. 32). The SROS consists of 36 items, rated on a 6-point Likert-type scale. The item statements describe specific behaviors which are based on one of six content areas. The six areas are 1) division of labor in marriage, 2) sex based power structure, 3) employment of women, 4) political status of women, 5) sex role socialization of children, and 6) miscellaneous sex role behavioral areas such as morals or standards of dress. Each of the 36 items on the scale is scored from 1 to 6. A subject with a higher total score is rated as having a more nontraditional sex role. This scale has been used in the sex role literature and should continue to be employed due to its emphasis on behavior rather than traits.

Research Findings on Sex Roles

The research on sex roles can be divided into three areas, research concerning 1) sex role stereotypes (beliefs about "typical" males and females), 2) sex role orientations (beliefs about "ideal" or "desirable" males and females), and 3) personal sex roles (self-perceived beliefs about oneself). The vast majority of the literature deals with sex role stereotypes. However, there are studies in each of the other areas as well. Stereotypical findings have been surprising in their lack of change over the years, whereas in general, sex role orientations and personal sex roles have shown some movement away from traditional sex roles and toward more egalitarian sex roles, although these findings are inconsistent.

The systematic investigation of sex role stereotypes began in earnest with the development of the SRSQ by Rosenkrantz et al. (1968). Their initial findings concluded that there were substantial differences between typical males and typical females in terms of sex role stereotypes. Subsequent investigations have employed not only the PAQ (the updated SRSQ), but other instruments as well, and have replicated these early findings, even though the studies have been reported as recently as 1987. So, for nearly 20 years, the status of sex role stereotypes has remained fairly constant. Examples of this work include Spence, Helmreich and Stapp (1975) and T. L. Ruble (1983). Both

sets of researchers employed the PAQ and found substantial evidence of sex role stereotypes. In fact, T. L. Ruble found significant differences on 53 of the 54 traits the PAQ examines.

Recent work on sex role stereotypes has expanded from the typical psychological trait approach to the use of behavioral and interest scales. Canter and Meyerowitz (1984) asked college students to respond to a behavioral questionnaire. The results indicated typical sex role stereotypes in perceptions of male and female behaviors. Subjects also indicated that male sex role stereotypes were stronger than female sex role stereotypes. Interests and personality factors were explored by Lewin and Tragos (1987). Their subjects were 15 to 18 years of age and were compared to adolescents tested in 1956. Results showed no change in sex role stereotypes for females, while males indicated increasing traditionalism.

The final study reviewed here concerning sex role stereotypes compared college students in 1978 to a 1957 sample by employing a checklist of sex role adjectives (Werner & LaRussa, 1985). Their results found that 62% of the adjectives used to describe males in 1957 were still employed in 1978, while 77% of the adjectives used to describe females in 1957 were still in effect. None of the adjectives switched over from one sex to the other, and the female adjectives that did change showed an increase toward

more favorable evaluations, while the male adjective changes showed an increase in more unfavorable evaluations. The overall indication of changes in sex role stereotypes has generally shown little movement. The majority of the empirical evidence has found that sex role stereotypes still remain strong after more than 20 years of investigation.

Sex role orientation research has received less attention, and the findings are not as consistent. The lack of consensus in this area is not surprising in that sex role orientations have a moral aspect. Orientations are opinions of how people should behave and thus are more likely to deviate over time than perceptions of actual behavior (sex role stereotypes). The upcoming section on sex role stereotype and sex role orientation ratings deals with this topic in detail. Hence at this point only a summary will be presented.

Studies of sex role orientation ratings have shown contradictory results. Some suggested that orientations should be sex typed and traditional, while others have suggested the opposite finding, that orientations should be androgynous and egalitarian. The sex of the rater appears to be an important factor in determining sex role orientations. Females are more likely to rate orientations less traditionally than males (Deutsch & Gilbert, 1976; McPherson & Spetrino, 1983; Scher, 1984). Yet, several studies indicated that orientations are sex typed (T. L.

Ruble, 1983; Silvern & Ryan, 1983; Urberg & LaBouvie-Vief, 1976). Finally it should be noted that the recent studies (e.g., T. L. Ruble, 1983), are not finding different results from the older studies (e.g., Urberg & LaBouvie-Vief, 1976). Overall there appear to be no consistent conclusions regarding sex role orientations.

The final area of investigation concerns personal sex roles, or the ratings given oneself on sex role measures. Again it appears that there is no consistent trend in how individuals perceive themselves, and it has been suggested that the reason for this inconsistency is because subcategories of sex roles have changed, and much of the research has not dealt with subsections of sex roles, only the totality of sex role scores (Thornton, Alwin, & Camburn, 1983). There is one finding on personal sex roles that has been consistent from study to study, and that is that males rate themselves as more traditional than females (Brogan & Kutner, 1976; Helmreich, Spence, & Gibson, 1982; Storms, 1979).

Beyond that one reliable finding, research requesting subjects to evaluate themselves has found sex typed individuals, movements toward egalitarianism, and movements toward more traditional sex roles. Employing the PAQ, and using college students as subjects, both Spence et al., (1975) and Storms (1979) found that subjects believed themselves to be sex typed. The work of Canter and

Meyerowitz (1984) and Robinson and Follingstad (1985) echoed the stereotypical sex role for behavioral aspects rather than psychological trait aspects of the sex roles. Canter and Meyerowitz found that college students endorsed stereotypical behavior in terms of ability, enjoyment of activity choice, opportunity to act and competence in these behaviors.

On the other hand, personal sex roles have indicated less traditionalism. McBroom (1984, 1987) found that both males and females endorsed less traditional domestic sex roles over the course of a five year longitudinal study. Initial support for this finding was offered by Helmreich, et al. (1982). These authors found increasing levels of egalitarianism between the years of 1972 to 1976. However, between 1976 and 1980, females showed a tendency (statistically significant) toward becoming more conservative, while the males showed no change in their perceived sex roles. Thus the field is not clear concerning changes in personal sex roles.

Research on personal sex roles and sex role orientation has not generated a common consensus, whereas studies on sex role stereotypes have. Males and females consistently rate the stereotypical male as more traditional than the stereotypical female (e.g., Brogan & Kutner, 1976; Larsen & Long, 1988; Storms, 1979; Swatos & McCauley, 1984). Studies testing sex role stereotypes have utilized different

measures testing psychological traits, behaviors, personality factors, interests, and attitudes. The subject populations tested have been variable and research has spanned over 20 years. Thus the pervasive existence of sex role stereotypes has been extensively documented.

In addition to these indications of the pervasiveness of sex roles stereotypes, there are other indicators of their generality. Swatos and McCauley (1984) documented sex role stereotypes in the working class, extending the finding beyond the typical college sample. Canter and Ageton (1984) found that while there are differences between races in terms of amount of sex role stereotyping, no race is free from this phenomenon. Williams and Best (1982) extended the findings cross culturally by exploring sex roles in 30 nations and found that women were regarded as expressive and men were regarded as instrumental in every country studied. Hence sex role stereotypes are deeply ingrained in culture and continue to be of interest to developmental psychologists as well as other scientists due to the pervasiveness, generality, and apparent general level of acceptance.

Methodological Problems in the Sex Role Literature

There are four methodological issues that will be addressed. The first is the problem involving definition of terms in the sex role literature. A second problem concerns

measurement difficulties. The third problem area has to do with the conception of sex roles as a unitary versus a multidimensional phenomenon. Lastly, the issue of the magnitude of the differences will be investigated. These issues are not the only methodological problems addressed in the literature; however, they appear to be the most commonly discussed.

There are two definitional issues that must be addressed in this section. The first controversy surrounds the use of the terms sex role stereotype versus sex stereotype (D. N. Ruble & T. L. Ruble, 1982). The use of the word "role" implies "appropriateness" of behavior to some, and thus suggests a moral element. However, the generally accepted definition of sex roles states nothing about appropriate behavior; rather, it states that sex roles are the actions and verbalizations one displays to others to indicate one's gender (Money & Ehrhardt, 1972). Thus the use of the term sex role stereotype is controversial.

The second definitional problem is more complex. It involves how psychologists have defined and operationalized the concept of sex differences (Eagly, 1987). In order to achieve the best experimental control, psychologists have attempted to control all outside variables, with the exception of gender in order to determine what sex differences exist. Thus subjects are put into social interactional situations with people they do not know, in a

place they are unfamiliar with, for a short period of time. If males and females react in the same manner, sex differences are not inferred. However, Eagly pointed out that this situation is exceptionally contrived, and hence the ecological validity may be totally lacking. As an example, Eagly referred to Maccoby and Jacklin's (1974) conclusion that males and females do not differ on level of nurturance, based on experimental (assumed laboratory) evidence. However, one look at reality would indicate that this conclusion is a complete violation of common sense. Women outnumber men in nurturing occupations by vast amounts. In general women are the homemakers, teachers (especially at the elementary level), and nurses. Hence, to conclude that men and women do not differ on level of nurturance appears to violate observation of real life roles. Thus, Eagly suggested that psychologists need to confront reality in the social world not just laboratory settings.

There are several different measurement problems that deal with sex role scales. D. N. Ruble and T. L. Ruble (1982) compared different sex role scales and concluded that, in part, the differing results between studies were due to the different styles of measurement. They suggested that there are four main types of measurement: open ended styles such as interviews or questionnaires, adjective checklists that assign traits to each sex, bipolar rating

scales, and Likert-type multiple point rating scales. Research in the area has shown that the forced-choice methods of ratings increase the number and magnitude of sex role stereotypes (Marantz & Mansfield, 1977). Hence different measurement scales may result in varying findings.

Although there are several sex role measures in the literature, Orlofsky (1981) stated that there are no good measures of sex role interests and sex role behaviors. The mainstream of the psychological literature has focused on traits or personality dimensions. Canter and Meyerowitz (1984) also believe that the focus on traits is inappropriate. Traits are hypothetical constructs that must be inferred from behavior. Due to the need for inference on the part of the subject, the use of psychological traits may be vague or misleading. Each subject rating traits must interpret what that trait means. What is independent? What is caring? These traits mean different things to different subjects and so may be inaccurate. Brogan and Kutner (1976) echoed this sentiment and believed the logical conclusion was to measure attitudes toward specific behaviors, rather than measuring traits and then inferring behavior.

A final measurement problem deals with the inability of the measurement instruments to keep pace with changes in the field. Orlofsky (1981) had two complaints in this area. The first had to do with the change in the conceptualizations of masculinity and femininity. These

concepts were originally operationalized as bipolar traits (Rosenkrantz et al., 1968). However, since then masculinity and femininity have been restructured as independent traits. Yet the old measures (e.g., SRSQ and the PAQ) are still in use. The other problem that Orlofsky described was the failure of the area to update the measurement instruments. The existing scales are viewed as dated by Orlofsky, and due to the cultural changes of the last 20 years many of the items no longer reflect sex role stereotypes. It is also possible that the scales reflect ceiling effects, with the item statements being so outdated that everyone either completely agrees or completely disagrees with the idea. Hence measurement instruments are in need of updating in order to stay current with the field and with societal changes.

It has been suggested that sex roles are multidimensional (D. N. Ruble & T. L. Ruble, 1982). Sex roles and their stereotypes are found when studying attitudes, interests, occupational preferences, personality dimensions, and behavior. Yet several authors have found that the correlations between these various aspects of sex roles are quite low (Deaux, 1984; Komarovsky & Mayer, 1984; Mussen, 1969; Orlofsky, 1981). Steven et al. (1983) found that attitudes as measured by a sex role scale did not correlate with interview answers that tapped behavioral dimensions of sex roles. Komarovsky and Mayer found weak

relationships between sex role stereotypes, orientations, and personal sex roles, and urged researchers to be very careful in their use of terminology in order to avoid confusion between studies.

If, as suggested, sex roles are multidimensional, then the inconsistency among studies may be due to the different dimensions being tested with each measure. Brogan and Kutner (1976) constructed their SROS based on six different aspects of sex role orientation such as division of labor in marriage, employment of women, and political status of women. Thornton et al. (1983) clustered their questions into eight categories covering such things as working women's relationships with their children, happiness of working versus at home mothers, and the wife's responsibility toward helping the husband's career. With differing scales tapping different dimensions of sex roles, and with perhaps differing weights to each dimension, it is not surprising that a comparison of total scores between studies often shows conflicting results. Hence, the dimensionality of sex roles is an area that deserves methodological attention (Deaux, 1984).

The final area of methodological problems revolves around the magnitude of the differences that are noted in sex role studies. Maccoby and Jacklin's (1974) overall conclusions after reviewing the sex differences literature were that there were very few actual differences between the

sexes, that existing differences were very small in degree, and that, for the most part, males and females were more alike than different. Deaux (1984) agrees with these findings. Furthermore, Deaux states that even when main effects for sex are found, they are relatively weak. The percentage of variance accounted for by sex is in most cases under 5%. Hence researchers should be searching for more important influences on social behavior.

The issue of the magnitude of sex differences has received in-depth attention from Eagly (1987). Eagly suggested that

judgments about size should not be delivered upon the mere inspection of a sex difference expressed in a particular metric, because meaningful judgments should take into account other known research findings, aspects of research methods, and, if possible, the evaluation of the behavior in the society. (p. 114)

Even the meta-analysts who have attempted to ascertain what is a "small" difference and what is a "big" difference do not agree. Therefore, Eagly suggested several guidelines for the interpretation of effect sizes.

One suggestion was to compare mean sex differences to mean differences between males and females in other areas of social behavior, such as aggression or conformity. Another idea was to employ binomial effect sizes. "To apply this technique to the interpretation of sex differences, an investigator determines the percentage of each sex above the average response in the combined group of women and men" (Eagly, 1987, p. 118). Eagly's last suggestion relied on

the common sense of the investigator. She recommended an examination of the utility of the behavior. Differences that appear to be small in magnitude may be of major importance if the behavior is one that is highly valued or closely monitored by others.

The importance of the magnitude of size effects should not be slighted. It appears that many researchers have forgotten the basic caveat of an introductory statistics class, which is that statistical significance does not mean practical significance. Studies in the area frequently report statistically significant findings, and they report the appropriate analysis of variance or multiple regression statistics, but they often fail to give the basic descriptive data necessary to evaluate the research findings on a practical level. It is common to find reported means for the groups of interest missing. Hence, judgments are not possible on behalf of the reader.

The other side of the situation occurs when means are given, but apparently ignored by the researcher. As an example, two studies by McBroom (1984, 1987) reported that "longitudinal comparisons over the five year period of 1975-1980 show that both men and women have significantly lessened in sex-role traditionalism" (1987, p. 439). Yet it should be noted that the mean changes in sex role scores over a five year period for both men and women were less than one full point. Thus, McBroom's conclusion that men

and women are "significantly less traditional" (1987, p. 448) is highly circumspect. Again, a critical reading of the literature must be undertaken in order to properly evaluate the results as presented by each researcher.

Summary

There is an abundance of literature, terms, measurement devices, and not surprisingly, methodological problems in the study of sex roles. The conflicting empirical results can be untangled if careful analysis of each study is undertaken. Problems may result from misuse of terminology, measuring devices that test separate dimensions of sex roles, or the mistaken interpretation of the magnitude of the effects that are found. Such a vast area requires careful attention to detail in order to lessen confusion and strengthen findings. Any of the areas just discussed could lead to interpretive errors and so extreme caution should be employed when researchers draw conclusions regarding sex roles.

The Development of Sex Typing

Developmental research in the area of sex typing has taken many forms, employed several sex role measures, and studied a wide variety of age groups. Not surprisingly, these studies have arrived at a variety of conclusions. Shaffer (1985) suggested dividing developmental sex role

research into three areas. These three areas are gender identity, the development of sex role stereotypes and the development of sex typed behavior. The area of gender identity focuses on cognitive-developmental sex role theory as espoused by Kohlberg (1966) which will be discussed later in the developmental theory section. The developmental trends and changes in sex role stereotypes across the life span will be summarized first. Then the development of sex typed behavior which deals with the activities and interests in which males and females engage in to varying degrees will be discussed.

Development of Sex Role Stereotypes

"In general the available research suggests that, on most dimensions, children's knowledge of sex stereotypes develops at an early age. . . children make few errors in assigning sex stereotypic labels to activities, occupations, and playthings" (D. N. Ruble & T. L. Ruble, 1982, p. 215). The overall developmental trends are not clear but appear to present a curvilinear trend with sex roles beginning early and strong, then lessening and then again becoming quite robust (Streitmatter, 1985). The next section will attempt to document these chronological changes in sex role development.

As soon as children begin to acquire gender identities, they also begin to show signs of sex role stereotypes. And

children who display the most stereotyping are the ones with the most mature gender identities (Kuhn, Nash, & Bruckner, 1978). The trend to stereotype increases over the next several years with children showing an increase in the rigidity of their sex role stereotypes. Sex roles are viewed as immutable rules that must be followed, and no deviation is allowed. However, this rigidity relaxes as the child reaches the approximate age of ten (Marantz & Mansfield, 1977; Ullian, 1976). At this point in development, sex role stereotypes become more pervasive, spreading to more abstract areas such as personality traits and achievement. Children also become more flexible in that it is now realized that personality traits, attitudes, behaviors and the like, while associated with one gender more than the other, are not required based on biological sex (Ullian).

During adolescence the trend fluctuates. The individual starts off as stereotyped, relaxes, then becomes increasingly stereotyped once again (Sigelman, Carr, & Begley, 1986; Streitmatter, 1985). Streitmatter suggested that sex role measures employing total scores blur the issue. It is individual components of the total scores that are changing over time with some components increasing, some decreasing, and some remaining constant. Streitmatter argued that this supported Erikson's stage of identity formation. At this stage, the adolescent is reevaluating

and incorporating new roles into the newly forming self-concept.

A study that did not support the curvilinear trend was conducted by Canter and Ageton (1984). They found a steady decline in traditional sex role stereotypes for females ages 13 to 19. While their results did show statistical significance, it should be noted that the mean scores collected as part of the National Youth Study dropped over the seven year period by a total of 1.34 points on a scale with a range of 40 points and this trend did not apply to males. There are changes in sex role stereotyping during the adolescent years, however, the direction of these changes is not consistent.

In adulthood, there were also some inconsistent findings, but the overall trend was for younger adults to be less traditional and older adults more traditional in their sex role stereotypes. These results were all based on cross-sectional data and hence should not be viewed as developmental stages or changes. A more likely explanation would be the finding of generational effects with older subjects displaying a continuing attitude rather than movement toward conservatism. Brogan and Kutner (1976) found that males over the ages of 23 were more traditional, while Swatos and McCauley (1984) found that males and females over the ages of 35 were more traditional. Dambrot et al. (1984) tested three generations of women and found

that only the eldest (mean age of 69) were significantly more traditional in their sex role beliefs. Mothers (mean age of 43) were more like their daughters (mean age of 19) than the eldest group (the grandmothers). A contrary finding by Urberg (1979) indicated that adults over 25 (through age 65) actually stereotyped less than 12- and 17-year old subjects. Hence, the results cited in the literature are not consistent throughout all adulthood cohort groups.

Development of Sex Typed Behavior

Children show preferences for sex typed toys, games and even same sex playmates before the age of three (Strayer, 1977). Investigations of children's bedrooms are often very telling (Rheingold & Cook, 1975). Girls rooms are often pink, frilly and filled with dolls and stuffed animals. Boys rooms tend to be bright colors, plain and loaded with balls and cars. The strong sex typing of these early years gives way temporarily for girls. Between the ages of four to ten, there is an increasing awareness of sex role stereotypical behavior. However, girls become increasingly interested in engaging in cross sex activities, games and toys (Hall & Halberstadt, 1980). The male role is more strongly stereotyped, and pressures to conform to it are strong. Boys are taught at early ages to be tough, not to cry and not to be a "sissy." Girls however are allowed to

deviate from their sex roles. Playing soccer, climbing trees and being a "tomboy" are tolerated, although perhaps not totally accepted. Thus girls are allowed to experiment with male roles, while males are not allowed to experiment with female roles.

There are also sex differences in aggressive, compliant and dependent behavior. Even in the preschool years, boys instigate and retaliate with more physical and verbal aggression than girls (Maccoby & Jacklin, 1980). The higher level of male aggressiveness is a stable trait. In adolescence and adulthood, males are five times more likely than females to be involved in antisocial behavior and criminal activity (Johnson, 1979). Also beginning in the preschool years, girls display more compliant and dependent behavior than boys (Block, 1976). Girls are more compliant to peers as well as adults. Furthermore, girls are more likely to seek adult assistance than boys. Hence, sex differences in emotionally based behaviors also exist.

In regards to achievement and career choice, again there are sex differences. Career choice follows the same path that behavior does. As boys and girls mature traditionally male dominated careers are considered more acceptable for both males and females, while males do not accept the idea of engaging in traditionally female dominated occupations (Hensley & Borges, 1981). Achievement offers one of the most dramatic examples of sex differences.

Not only do different areas show sex differences (spatial ability, verbal ability, math ability), but more telling are the explanations behind achievements and failures as offered by males and females (Nemerowicz, 1979). When females fail, it is because of a lack of ability. When they succeed it is because of effort. For males, failure is due to lack of effort or failure to encounter a learning opportunity, while success is due to ability. Additionally, female achievement is devalued by members of both sexes, especially if the success is in a traditionally masculine area. Thus differences in behavior are evident from early ages and explanations for these differences are dependent on the gender of the individual.

Summary

The inconsistencies in the literature regarding the development of sex typing may have several explanations. The measures employed often require a forced choice on the part of the subject. This methodology has been implicated in increasing the amount and the magnitude of differences between the sexes (Marantz & Mansfield, 1977; D. N. Ruble & T. L. Ruble, 1982). Additionally, the use of total scores may be deceiving. Sex role measures are often made up of several very different areas such as employment of women, political status of women, or division of labor in marriage. It has been suggested that these factors may be

differentially salient across the life span. Hence, total scores obscure the changes that may be taking place at a more specific level or at a specific point in time. Furthermore, differences between studies may be due to differential loadings of these factors between measures. A final reason for variability between studies may be due to the idea that sex roles fluctuate across the life span (Minnigerode & Lee, 1978). The actual social roles that an individual becomes involved in over the course of a lifetime change dramatically, and with these changing roles comes a different set of behavioral and attitudinal expectations. For example, parenthood tends to increase traditional sex roles, while grandparenthood tends to relax sex roles (Cowan & Cowan, 1983). Thus there are many reasons why the literature appears to have inconsistent findings and more work in the area of the development of sex roles is warranted.

Developmental Theories

There are several theoretical formulations that have been advanced to explain the development of sex typed behavior. The oldest would be psychoanalytic theory as developed by Freud. The main emphasis for Freud is on identification of the child with the same sex parent. The two theories that have amassed the most research are social learning theory and cognitive-developmental theory. Social

learning theory espouses basic principles of learning to explain sex typing. Cognitive-developmental theory centers on the development of gender identity and the cognitive processes needed to acquire a mature sense of gender. Newer theories are gender schema theory and social-role theory. Gender schema theory blends social learning with cognitive-developmental and adds information processing aspects as well. Social-role theory explains sex roles as based on adaption to other social roles rather than sex roles as being primary. These five theories will be elaborated with supporting and refuting evidence offered where available.

Psychoanalytic Theory

The basis of Freud's theory of sex typing is the process of identification. According to Freud, sex typing occurs during the third psychosexual stage of development, the phallic stage. Children are generally between the ages of three to six at this point, and the beginning of sex typing occurs once the child has noticed the biological differences in genitals between the sexes. Having noticed the difference between the sexes, the child must now set out to resolve the Oedipus Complex if the child is a boy, and the Electra Complex if the child is a girl. Both resolutions revolve around identification with the same sex parent. Boys are hypothesized to have a stronger and earlier resolution to their complex due to the increased

severity and tension the complex causes. In the end, the boys imitate and internalize the attitudes and behaviors of their fathers, while the girls model their mothers. Thus, sex typing of the next generation has successfully begun.

In general, most of the current work in sex roles does not employ a psychoanalytical framework. However, there is evidence that does support some of Freud's ideas concerning sex typing. For example, Shaffer (1985) supplies three pieces of supportive evidence. First, the ages that Freud hypothesized (ages three to six) for the phallic stage fit in very well with studies on gender identity. Second, Freud suggested that the developmental trends between males and females will differ, with males showing an earlier and stronger sex typing. This indeed seems to be the case. Studies have shown that boys are more strongly sex typed at earlier ages than girls. Finally, Freud indicated that fathers are especially important in the sex typing of not only boys, but girls as well. Evidence cited by Shaffer has shown that at these early ages boys need a male role model to emulate, and girls need a male model for long term interpersonal social adjustment.

Yet, there is damaging evidence as well. Most importantly, several studies (Katcher, 1955; McConaghy, 1979) have shown that children between the ages of three and six cannot differentiate male/female genitalia. Since this is the basis for the beginning of the sex typing process, it

seems impossible to proceed any further according to psychoanalytic theory without this most valuable information. Further, Freud stated that boys identify best with a hostile father figure. Conversely, evidence has shown that boys identify best with a warm and caring father, rather than a hostile father (Hetherington & Frankie, 1967). While there is support for some of Freud's assertions, the damaging empirical evidence is fairly strong. Thus the psychoanalytic theory of sex typing is no longer frequently employed.

Social Learning Theory

The interpretation of social learning theory in the sex typing literature is extremely varied. Some authors consider it to include operant conditioning, observational learning, identification, imitation, all of the general principles of learning (such as reinforcement, punishment, generalization, extinction, and discrimination), and the most recent writings in the area contain a strong cognitive component as well. Arguments have ensued regarding these areas. However, for the most part there is agreement on the basics of the social learning theory interpretation of sex typing.

The basic premise of social learning theory in regard to sex typing is that sex roles are a learned phenomenon. Thus, they are not inevitable nor are they impervious to

change (Bem, 1983). Children can be taught to be sex typed as masculine or feminine, or they can be taught to be androgynous. Given the appropriate learning environment, and correct models from which to glean information, a child can become sex typed in the fashion that is appropriate or desired by each society or culture. Bem gives extensive instructions on how to raise "gender-aschematic" children, by providing them with the "right" environment, both physically and psychologically.

The manner in which sex typing is learned according to social learning theory is based on the general principles of learning. Shaffer (1985) breaks down the learning of sex typing into two categories: direct tuition or teaching and observational learning. Direct teaching of sex roles involves the processes of reinforcement and punishment. When children display sex-appropriate behavior, they are reinforced and hence the behavior is more likely to recur. When children engage in sex-inappropriate behavior, they are punished, and hence the behavior is less likely to recur. The most salient teachers in this regard are the parents. And the sex role expectations regarding children's behavior are quite clearly communicated to children, even at young ages. As an example, consider the color and style of dress of a newborn on the way home from the hospital. Also consider the toys already received. For girls, the flowers and balloons are pink, along with her frilly dress and pink

baby blanket. The toys are dolls and stuffed animals. The newborn boy received blue flowers and balloons, a blue sports outfit of some type, and probably even sporting equipment such as balls or basketball hoops (with suction cups to be attached to the crib). Even the stuffed toys little boys receive are likely to be balls rather than dolls of some type.

As the child grows, participation in and with sex-appropriate items will be encouraged while playing with sex-inappropriate items will be discouraged, especially for boys (D. N. Ruble, 1984). D. N. Ruble has pointed out that adults have differing expectations for girls and boys, and so they treat them differently. Furthermore, children themselves report that their parents do indeed treat them differentially, and that their parents display different attitudes toward them based on their gender (Mischel, 1970). Not surprisingly, then, children form differing sex role stereotypes about mothers and fathers, with mothers viewed as more nurturant and fathers viewed as more powerful and more punitive. D. N. Ruble also pointed out that boys receive more pressure to conform to sex roles than do girls, and that the pressure is exerted more often by the father than the mother.

In addition to the differential effects of reinforcement and punishment as methods of direct teaching of sex roles, the principles of generalization and

discrimination are also employed. The principle of generalization states that once a response has been learned, it will be demonstrated in other situations that are similar to the original circumstance. Since girls are often rewarded for obedience and quiet activity such as coloring, it is likely that this behavior will be generalized to other similar situations such as nursery school. Boys, on the other hand, are often rewarded for rough and tumble play, such as sports activities, and so it is likely that when playing with other boys at school these sex-appropriate behaviors will again be utilized and reinforced. Mussen (1969) suggested that as cognitive development continues, children learn to label activities that are sex-appropriate, and so generalization will be verbally mediated. This mediated generalization serves to strengthen and further facilitate sex typing in the growing child.

The flip side of generalization is discrimination. Discrimination involves the enactment of sex role behavior. At this point the behavior has been learned, but the actor must decide whether or not this is the appropriate time and place in which to engage in this specific behavior. Even sex role behavior that is extensively culturally regulated is not appropriate in every situation. Therefore, sex role behavior is also situationally specific (Eagly, 1987). Mischel (1970) rather generally stated that enactment of sex role behavior is based on motivational considerations. A

more specific set of factors was outlined by Orlofsky, Cohen, and Ramsden (1985). Orlofsky et al. suggested that sex role enactments are influenced by the fact that conforming to societal norms is highly sanctioned, that individuals behave in order to escape negative sanctions, and that people often behave in order to use the situation to their best advantage. The best example of discrimination of sex role behavior would be displayed by an androgynous person as defined by Bem (1974). According to Bem, the purpose of androgyny is flexibility. Androgyny allows the individual to behave according to the situation first, and not according to the sex role. So enactment of sex role behavior is situationally constrained, and individuals that are defined as androgynous are the most situationally flexible or discriminating in their behavior.

The other major tenet of social learning theory is observational learning. Mischel (1970) suggested that sex roles are initially acquired by observing the actions of others and then the subject models or imitates these actions. Reinforcement or punishment need not be personally experienced to gain knowledge about appropriate and inappropriate sex role actions.

The main concern for social learning theorists is the nature of the model. At what point do children pay attention to models, and are some models more salient than others? The original hypothesis was that children pay

attention to same sex models at very early ages and so observe differences in treatment of the sexes early on. However, it has been found that children do not pay attention to same sex models until they are six or seven years of age, long past the original stages of sex role development (D. N. Ruble, Balaban, & Cooper, 1981). The main characteristics of a model that increase the chances of a child paying attention and hence learning are nurturance and power (Mischel, 1970). This appears to be especially true for boys, but it also holds for girls. It is also important to note that children do not model only adults. Other children play a substantial role in sex typing as the sanctions placed by children against other children can be very harsh. Playgrounds abound with taunts and name calling by children. In order to avoid these negative sanctions by ones peers it is best to behave in accord with gender expectancies. Otherwise one runs the risk of being labeled a "sissy" or a "tomboy" and becoming an outcast. Therefore, children model other children that they believe are powerful and are nurturant in hopes of being rewarded and accepted.

The latest theoretical position that falls into the social learning category (very broadly defined) would be the social-cognitive appraisal of sex role development as defined by Bussey (1983). Bussey attempted to update the social learning theory position on same sex modeling, while also incorporating a stronger cognitive component into the

model. Bussey contended that past research was not totally supportive of children engaging in same sex modeling. Her work has shown that if children were exposed to multiple models of both sexes, they would differentiate between the two sexes and then determine what proportion of behaviors are engaged in by each sex. This proportion gives the child the answer as to whether or not the behavior is sex appropriate for him or her, and thus the child can respond properly.

Bussey (1983) employed a four step model of sex role development. Step one involved the realization that there were two groups of people, males and females. Step two was to recognize which group they belong to. Step three required the cognitive capacity to label and then encode behaviors as either male or female appropriate. That is, one must have the ability to categorize sex role behavior. Step four was the realization that the sex role typing complete with cultural sanctions, reinforcement and punishment applied to oneself. In addition, Bussey noted that step four must be qualified by stating that children of different ages give different reasons for their sex-appropriate behavior. By involving a stronger cognitive component, Bussey attempted to create a more active participant in sex role development than the traditional social learning theory which contained a more powerful environmental element, and hence a more passive subject.

Bussey's work shows promise as an updated social learning theory of sex role development.

Cognitive-Developmental Theory

Kohlberg's (1966) theory of sex typing "assumes that basic sexual attitudes are not patterned directly by either biological instincts or arbitrary cultural norms, but by the child's cognitive organization of his social world along sex role dimensions" (p. 82). It is the child that is the primary sex role socialization agent. The child actively attempts to make sense of the social world. The child organizes thoughts and perceptions into sex role knowledge and understanding based on personal interpretations of the social world. Kohlberg states that "learning is cognitive in the sense that it is selective and internally organized by relational schemata rather than directly reflecting associations of events in the outer world" (p. 83). Observational learning, imitation and reinforcement are all utilized. However, the concept of gender identity precedes the use of these learning tools. Kohlberg hypothesized that the internalized sex role identity develops first; then sex appropriate behaviors follow.

There are three developmental stages of sex typing. The first occurs around the age of two to three and is called gender labeling. During this stage children learn that there are two sexes and that they themselves belong to

one of these two groups. Kohlberg maintained, unlike psychoanalytic theory, that the basis for understanding the difference between sexes is not based on knowledge of genitalia. Instead Kohlberg focused on the more outward expressions of masculinity and femininity such as physical size, hair style, or clothing.

The second stage of development is labeled gender stability which occurs around the ages of three to five. The cognitive achievement that occurs during this stage is one of temporal stability. During gender stability, children come to understand that gender is fixed across time such that little girls grow up to be mommies and little boys grow up to be daddies. Hence once a boy, always a boy.

The third stage is labeled gender consistency and occurs between the ages of four and seven. At this point of development the child becomes aware of consistency in gender across situations. For example, superficial changes in hair length or style of dress do not cause changes in gender. Appearance, while perhaps deceiving, does not alter ones biological sex. Thus the formation of a mature gender concept has now been completed.

Huston's (1983) review of sex typing pointed out that the development of sex roles and sex role stereotypes is not a linear trend, but rather a curvilinear function. This trend is based upon the child's cognitive developmental level. Sex role stereotyping starts off weakly and

inconsistently until the child learns gender constancy. As this learning is occurring, the rigidity of sex role stereotyping is increasing. Once the child has moved into Piaget's stage of concrete operations, the child can begin to relax his views and become more flexible. But as adolescence nears an end, sex role stereotypes are once again pervasive.

According to Shaffer's (1985) review, cognitive-developmental theory has received support for several of its components. First, there is a relationship between cognitive development and gender development as hypothesized. Second, the three stage progression of gender identification has been well documented. Finally, studies have shown that gender understanding does affect sex role stereotyping across the life span. Therefore, several of Kohlberg's ideas have received empirical support.

There are also several problems associated with cognitive-developmental theory. The most damaging empirical evidence is that sex typing is well underway before gender identity is completely established. For example, even before the age of two, children are already showing a preference for sex typed toys. Bem (1983) saw Kohlberg's failure to explain why sex roles have a primacy over other categories such as religion or race as a major problem. According to Bem, Kohlberg viewed sex as more perceptually salient than other categories, but failed to explain how the

categories are hierarchically structured. Another criticism was levied by Mussen (1969). Mussen argued that cognitive-developmental theory was descriptive rather than explanatory. Hence, while it may provide interesting reading, it fails to explain how development actually occurs. Thus, Kohlberg's theory is not without problems. Some of these problems appear to be especially damaging.

Gender Schema Theory

Gender schema theory is a true hybrid among theories. It combines aspects of both cognitive-developmental theory and social learning theory. However, gender schema theory is considered primarily an information processing theory of sex typing. Two sets of researchers have simultaneously developed gender schema theories and for the most part the theories are compatible (Bem, 1981, 1983; Martin & Halverson, 1981). The basic construct in gender schema theory is the schema which is defined as, "a cognitive structure consisting of a set of expectations or a network of associations that guide and organize an individual's perceptions" (Huston, 1983, p. 399).

Schemas serve three main functions according to Martin and Halverson (1981). Schemas regulate behavior in that they set up a guide for anticipating future behavior. Other areas have labeled this function a script. Scripts or schemas define a temporal sequence of actions for familiar

situations. The second function of schemas is to organize incoming information and direct attention selectively. Schemas dictate what information should be paid attention to and what information should be ignored. Information that is consistent with the present gender schema will be incorporated into the schema and further elaborated upon. Information that is inconsistent with the gender schema may be ignored or it may be misinterpreted and hence made to fit. It is this function of schematic processing that explains why sex role stereotypes are so hard to change and why they are self-perpetuating. They become self-fulfilling prophecies due to their ability to screen out incompatible information and accept only confirming information. The third function of schemas is to provide structure for information that may be incomplete or ambiguous. Again in this regard schemas mirror scripts. The ability to fill in missing information is labeled a default function which is automatically undertaken in order to clarify and complete the incoming material. Thus gender schemas increase the efficiency of information processing, but at the same time they may also distort the information in order to make it schematic-consistent.

The development of sex typing in children requires one basic assumption according to Martin and Halverson (1981). This assumption is congruent with the cognitive-developmental viewpoint, as it states that children have a

tendency to group or categorize information. By classifying information children begin the process of self-definition. Classification by sex is considered a pervasive phenomenon. In fact, even Bem (1983) states that "no other dichotomy in human experience appears to have as many entities linked to it as does the distinction between females and males" (p. 603).

The first developmental step (Martin & Halverson, 1981) would be the ability to accurately identify people based on gender distinctions. Once simple gender identity is established, the "in-group" with which one identifies will come to be evaluated positively while the "out-group" will come to be evaluated negatively. Hence, the second step is to associate values with the traits, behaviors and attitudes that fit into the person's own gender schema. Continued information processing leads to elaboration and extension of the personal gender schema, while at the same time, gender inconsistent information is ignored. This leads to a lack of development of the opposite sex gender schema. As development proceeds, the self-concept itself becomes assimilated into the gender schema (Bem 1983). If the individual's self-concept is organized on the basis of the gender schema, the person will be viewed as extremely sex typed. Thus an androgynous individual refrains from making judgments based upon gender as a main variable, while a highly sex typed individual will employ the gender based

explanations more freely. Development, then, is a continuous process involving additions to the gender schema and sex stereotyping is considered a normal cognitive process.

There is evidence to support the influence of gender schemas in sex typed individuals compared to nonsex typed individuals. Bem (1981) found that sex typed persons recalled significantly more gender related words in a free recall experiment. Highly sex typed persons were also found to display faster information processing when making gender schema-consistent judgments. Thus the availability of gender as an extremely salient variable for sex typed individuals has been supported.

There are also some problems with the gender schema theory of sex typing. According to Martin and Halverson (1981) androgynous persons are hard to explain. How is it that they resisted sex typing? In fact, gender schema theory would predict that androgynous individuals would show a lack of competence, since inappropriate information would be filtered out of their schemas. Additionally, Martin and Halverson see many potentials for distortion in schematic processing which could potentially lead to very distorted sex typing. Individuals may use inappropriate schemas or employ an illusory data base or make illusory correlations. Any of these errors could serve to make sex stereotypes much more extreme than reality would suggest. Therefore,

continued work in gender schema theory is needed to clarify these issues.

Social-Role Theory

Social-role theory revolves around the concept of roles within social systems and the influences of current social situations on adult sex role behavior (Bee & Mitchell, 1984). The social systems within which everyone operates on a daily basis are made up of a series of positions. Roles are the contents or behavioral implications of these social positions. Roles are more formally defined as "a set of expected behaviors or qualities" (p. 23) that characterize social positions. The differing social roles share some specific characteristics. Roles are viewed as at least partially culturally specific. Different cultures may share similar views of a particular role, but the specifics of the behavioral expectancies will be defined very explicitly by the culture in which one resides. As a corollary to this characteristic, Bee and Mitchell note that as a culture changes, so do the culturally prescribed roles; hence roles are not stagnant. The second characteristic of roles is that they usually occur in complementary pairs. Hence in the case of sex roles, there are males and females. The area of research and debate would not exist if humans as a race were unisexual. If all humans were identical in biological make-up, gender as a category would cease to

exist. The third characteristic of roles is that people occupy several at one time. In addition to gender roles, there are also family roles, work roles and age roles.

Because of this plethora of roles, role conflict or role strain may occur. Role conflict occurs when the differing roles in which an individual is engaged do not fit together well. There may be time conflicts because of engaging in too many roles or there may be psychological conflicts because different roles require different responses. In these situations the individual must choose whether to use, for example, the gender response or the worker response in a given situation. Role strain occurs when one individual role becomes too demanding and the individual feels incompetent to live up to its demands. New parents often feel overwhelmed by their responsibilities shortly after the birth of a child, especially the first child. Hence the number of roles and the type of roles occupied may lead to problems for the individual. Overall the social roles that each individual engages in define the parameters of that person's behavior.

The major theoretical position utilizing social-role theory to explain sex role behavior has been espoused by Eagly (1987). Eagly stated that "the theoretical orientation that is proposed considers sex differences to be a product of the social roles that regulate behavior in adult life" (p. 7). Furthermore, Eagly believed that the

importance of adult social roles and contemporaneous social influences override the "more distal factors such as childhood socialization pressures and biological predispositions" (p. 9). Overall, Eagly concluded that

the social-role theory of sex differences promotes a view of social life as fundamentally gendered...women and men are subjected to somewhat different expectations, to which they conform to some degree, and they develop somewhat different skills as well as attitudes and beliefs. (p. 31)

So the oft found conclusion that as a group women are more communal or expressive than men is explained by the common domestic role women occupy. In the same vein, men are more agentic or instrumental because of their general role of worker/economic provider.

Eagly (1987) defined sex roles in the same fashion as defined by Bee and Mitchell (1984). Sex roles are "those shared expectations (about appropriate qualities and behaviors) that apply to individuals on the basis of their socially identified gender" (Eagly, p. 12). However, there are two aspects of sex roles that separate them from other social roles. Sex roles have a larger scope or a greater extensiveness than other social roles. Sex roles find application in almost every aspect of daily life from division of labor, to political status, to socialization of children. Sex roles then appear to permeate almost every aspect of life. Additionally, sex roles have a greater generality than other social roles. Expectations about sex-appropriate behavior can include personality dispositions,

moral and social norms, and even style of dress. Thus, sex roles are pervasive in our daily lives.

A fundamental error in research methodology according to Eagly (1987) has been made by psychologists attempting to understand sex differences. The mistake was labeled by Eagly as one of failure to establish ecological validity. Tests of sex differences are usually conducted in a laboratory setting for a short period of time with strangers. The reason for this was to control extraneous factors and increase the power and internal validity of the experiment. Unfortunately, the situation may be so removed from actual life situations that the conclusions cannot be generalized to settings outside the laboratory. As an example, Eagly referred to Maccoby and Jacklin's (1974) conclusion that there was no clear cut evidence to show that females were more nurturant than males. Maccoby and Jacklin's conclusions were based on a compilation of studies (laboratory variety) that "could not find evidence that female and male research subjects, when faced with the same eliciting stimuli, behaved with differing degrees of nurturance" (p. 11). However, completely ignored by Maccoby and Jacklin, (along with most other sex difference researchers) is the fact that in natural settings women do occupy nurturant roles (domestic, teaching, nursing) in much higher proportions than males. Therefore, behavior in natural settings is found to differ from behavior in

laboratory settings. Eagly concluded that the implication of this conflict is that "women and men often behave differently because they are carrying out dissimilar organizational and familial roles" (p. 11).

Social learning theorists and gender schema theorists have agreed with the notion of sex roles reflecting situational behavior. Eagly and her colleagues (Eagly & Steffen, 1984) as well as others (Abrahams, Feldman & Nash, 1978; Buckley & Hundleby, 1983; England, 1988) have found substantial support for the idea that role demands, such as differing occupations or varying situations, override the effects or expectations of sex role behaviors and attitudes. This becomes the main hypothesis of Eagly's social-role theory. It is conformity to the social role and not gender roles that determines behaviors and attitudes. However, as stated, sex roles are pervasive and general in scope. Due to the continuing division of labor between females and males, sex roles continue to dominate behavior and attitude expectations.

Social-role theory, while relatively new, has received empirical support. Yet, several caveats for its use need to be enumerated. A potential difficulty with social role theory concerns the all encompassing definition of gender roles developed by Eagly (1987). Eagly stated that gender roles are more extensive and more general than any other social role. This statement gives the impression that

gender roles would be the most dominant social role in an individual's life. Hence, when an individual experiences role conflict, the gender role should dominate the situational response. Yet Eagly's own research (Eagly & Steffen, 1984) indicates this is not the case. Work roles have been found to be more dominant in determining situational reactions than gender roles. Thus there appears to be a conflict between the definition of gender role and the resolution of role conflicts as defined by Eagly.

Other potential problems concern the explanation of why an individual becomes involved in a particular role and the level of activity displayed by the individual. Social-role theory has not yet addressed the mechanics of how a person becomes involved in a particular role. The explanations to date have revolved around the impact the role has on the individual without addressing the individual's entrance into that specific role. In addition, social-role theory views the individual as a passive respondent to the situational role. Interindividual differences need to be assessed in order to examine the interaction of personal characteristics with the situational characteristics. This would move the social-role theory towards a more active conception of human nature. Thus, social-role theory is not complete. The theory needs additional clarification of its concepts.

Summary

The chronological development of theoretical frameworks has progressed from an emphasis on biological foundations, to basic principles of learning, to cognitive functions, to social roles. In addition, the theories have progressively become more eclectic in their orientations. Most theoretical developments have also encouraged changes in the conception of human nature which has progressed from the notion of passive, mechanistic reactors to the environment to active, organismic actors in the environment. While the newer theories are not without their problems, substantial progress towards a more complete understanding of sex role development has occurred.

Differing types of empirical evidence would support the varying theoretical positions presented. Research evidence documenting the importance of early life experiences and the family environment would support the psychoanalytic and cognitive-developmental theoretical frameworks. Social learning theory would best be supported by experimental evidence. Laboratory experiments of reinforcement or imitation would demonstrate the processes of social learning. Gender schema theory would also be supported through continued laboratory work. Experimental research in the gender schematic framework demonstrates the functioning of schemas. Little work has been done concerning the developmental influences of gender schemas, although the

assumption made by both sets of authors in this area suggests the importance of early childhood experiences in forming and delineating gender schemas. Social-role theory is best supported by either a comparison of the influences of social roles, or by an examination of the relative influence of current social roles versus previous family life experiences. Social role theory assumes that current social roles outweigh the influence of past family experiences. Thus the differing theoretical approaches require differing styles of empirical support.

Family Background

Socialization of sex roles as previously noted begins very early in life. The family, with its own structure, and value system and the personal experiences one gains therein, in all likelihood plays the most important role in shaping a child's sex role. Many variables have been studied regarding family make-up and sex role development. For example, Canter and Ageton (1984) found that whites were less traditional than other races while Swatos and McCauley (1984) found that the "working class" was more traditional than those of other socioeconomic status groups. More specific family background variables were studied by Bell et al. (1985). Results of their work indicated that family size, ordinal position, sibling gender, and sibling spacing did not impact sex role development. The only variable of

importance was gender of the subject, with females being less traditional than males. There are several areas of family influence on sex role development that have been empirically evaluated and found to be important. The areas to be specifically investigated in this section are 1) education, 2) maternal employment, 3) divorce, and 4) religion. Each of these areas will be summarized below.

The area of education has been heavily researched and can be subdivided into three areas 1) parental education level, 2) personal education level, and 3) personal educational goals. Increased education promotes greater opportunities in terms of employment, advancement, and in general lifestyle options. Therefore, education is thought to have a liberalizing effect, and the greater the educational level the greater the liberalization.

Maternal employment is expected to influence sex role development due to the family role restructuring that takes place when the mother works outside the home. In this case both parents are viewed in an instrumental light since both are out in the "real world" working and bringing home an income. At the same time, it is likely that the father will also take over some more of the domestic responsibilities and hence he will be viewed in a more feminine role thus reducing the sex role stereotype of division of labor in the home (Baruch & Barnett, 1986).

Closely related to the situation of maternal employment is the family restructuring involved after a divorce. Divorce forces the custodial parent into role restructuring since they are now "required" to do two roles, that of both instrumental father and expressive mother. It should be noted that while mothers most often are granted custody of the dependent children, in approximately 11% of the cases fathers are awarded custody (U.S. Bureau of Census, 1987). Furthermore, the custodial parent role restructuring is often temporary since 66% of divorced parents remarry (Glick & Lin, 1987). In the majority of cases (89%), the effect of divorce is best explained in terms of loss of the father role. Sons do not have a father with which to identify and daughters do not have a father with which they can learn interpersonal skills that will benefit them socially in adolescence. Again however, loss of the father figure is frequently temporary. Furthermore the time frame for remarriage is actually quite short, with about 50% of divorced parents remarrying within three years (London & Wilson, 1988). Whether the mother is awarded custody or the father is awarded custody, the structure of a divorced family differs from that of an intact family; hence, an impact on sex role development may be expected.

The last area of investigation is that of religion. The family unit is the main value dispensing system for children and many of these values are taught within the

framework of religious instruction. In fact, some (Ruether, 1974; Wilson, 1978) have suggested that religion is probably the most important influence in shaping and maintaining sex roles, especially female sex roles which are typically subordinate to that of the males. Since an individual's main religious training comes from the family, the type of religion (denomination) as well as the amount of religious activity engaged in is an important area of study.

Thus, studying familial antecedents in sex role development appears to be important for a complete understanding of the developmental process. Huston (1983) suggested that there are four potential sources of parental influence. The first was that of role modeling, which is of particular importance when investigating divorced families and families in which both parents are employed. Huston also suggested that parental attitudes are important. These attitudes would be shaped themselves based in part on the parents' educational level and also on the parents' religiosity. Therefore these are prominent areas of study. Parental personality differences could also be a source of differential socialization. For example, the employed professional mother is likely to differ in personality structure from the voluntarily homebound housewife. Huston's last idea was that childrearing practices will differ between families and these differences may be a reflection of the family structure. Again, an employed or

divorced mother will likely have different expectations and place different demands on her children in terms of independence or household responsibilities. The effects of family structure and parental roles on socialization of sex roles are, therefore, of prime importance, especially in the areas of education, maternal employment, divorce, and religion.

Education

The impact of education on sex role development has several aspects. Education can be analyzed as potential effects due to the level of education achieved by the subject's parents. Education can be investigated from the subject's own achievement level or from the subject's projection of the final level of education they wish to achieve. All three of these aspects have been investigated regarding their particular impact on sex role development.

Parental educational level is projected to affect a child's sex role according to Brogan and Kutner's (1976) "educational attainment model." Brogan and Kutner hypothesized that highly educated mothers (they do not project a paternal effect) will transmit a more nontraditional sex role to their children. Thus, education must first affect the mother's sex role and then after incorporating this nontraditional sex role into her

attitudes and actions, the mother transmits these beliefs and behaviors to her children.

The results of investigations on the impact of parental education on children's sex roles have been equivocal. This is in part due to the differing measures of sex roles that have been employed, along with varying classifications of parental educational level. Also, differing types of statistical analyses have been employed and thus again the results have varied from study to study.

The general conclusion of studies employing subjects under 18 years of age supported the influence of higher parental education level on the formation of egalitarian sex roles. Richmond-Abbott (1984) employed subjects between the ages of eight and fourteen and found that both paternal and maternal educational levels were related to sex roles as defined by the Traditional Family Ideology Scale (TFI). This scale reflects attitudes towards male and female roles and responsibilities. A longitudinal study by Thornton et al. (1983) tracked children from birth through age 18 and also concluded that both paternal and maternal educational levels were related to the sex roles of their children. Kiecolt and Acock (1988) studied 16-year-old subjects and found that maternal educational level was related to sex roles, for female children. Hence the link between parental educational level and children's sex roles, is inconsistent.

Studies employing college aged subjects are also inconclusive. Employing only female subjects, both Brogan and Kutner (1976) and Tallichet and Willits (1986) found that maternal educational level was related to the daughter's sex role such that the higher the level of education, the more egalitarian the sex role. Meier (1972) used both male and female college students as subjects and found the effect of maternal education held. Meier also tested for the effects of paternal education, but was unable to find a relationship for either sons or daughters.

Studies done by Tomeh (1979) and Zuckerman (1981) found little relationship between parental educational level and the sex role of college aged students. At best, Zuckerman reported that paternal educational level in combination with a Jewish upbringing accounted for 4% of the variance in the daughter's sex role score (AWS). Tomeh found no statistical relationship between parental education and any of the four sex role measures tested. Thus, it is possible to once again find studies that support a relationship between education of parents and sex roles of their children, and at the same time find studies that show no evidence of a link between these two variables.

A closer comparison of studies utilizing college students as subjects is needed in order to try and explain this lack of consensus. It is interesting to note that while all five of these studies used college students as

their sample, they each employed different dependent variables. Three of the studies employed standard sex role measures (AWS, FSE, and the SROS) while the other two studies used listings of questions that had not been standardized. Most interesting, however, is that the two studies concluding no relationship (Tomeh, 1979; Zuckerman, 1981) employed the same statistical technique, a multiple classification analysis. The research studies that found a relationship (Brogan & Kutner, 1976; Meier, 1972; Tallichet & Willits, 1986) all utilized variations of analysis of variance techniques. So, while there appear to be differences between groups in terms of parental educational effects, these effects are not strong enough to predict variation in sex role scores.

Another aspect of education and its potential impact on sex role development comes from the arena of personal experience. College attendance in particular has been identified as affecting a person's attitudes and values. In general, the impact of college is viewed as a "liberalizing factor" in a person's general outlook, especially where social issues are concerned (Funk & Willits, 1987).

Individuals who attend college, often even for only a year, have been found to differ significantly from their noncollege counterparts in areas such as attitudes toward religion and traditional gender roles. Overall, college attendees are less inclined to accept the traditional roles of women in society and more likely to approve of women working and participating in public affairs. (p. 224)

The research in the area of personal experience then, focuses on the level of education achieved, or more simply, the year in school of the subject and compares sex role beliefs to subjects at other educational levels.

The conclusions of studies dealing with personal educational achievement have in general reached a consensus that college attendance is associated with an increase in sex role egalitarianism. The strongest support for this statement comes from studies by Dreyer, Woods and James (1981), Mason and Bumpass (1975), and Morgan and Walker (1983). All three of these studies employed regression analysis. The results showed that educational level was the number one factor for Dreyer et al., and Mason and Bumpass, while it was the number two factor (behind age) for Morgan et al. All three studies employed different measures of sex roles and their subject populations were adult females. However, the results of the Dreyer et al. study were exceptionally strong, with education alone accounting for 61% of the variance.

More support came from the work of Funk and Willits (1987) who followed subjects longitudinally for over ten years. Their male and female subjects reported less sex role traditionalism the longer they stayed in college. Also of note from Funk and Willits is that the subject's sex role attitudes in high school appeared to predict college attendance. Those in high school with the lowest (most

traditional) scores, were the subjects that did not attend college, while those with the highest scores did attend college. According to the authors however, it was college attendance per se that was related to sex role attitudes based on analyses that controlled for initial attitude level. Renzetti (1987) also found that among college women, those listed as juniors or seniors differed on attitudes towards feminism, traditional sex role attitudes and level of support for the feminist movement compared to freshman and sophomore subjects.

The most equivocal results concerning the effects of educational level on personal sex roles comes from studies employing the BSRI as the dependent measure. Martin and Light (1984) found that among college males and females the percentage of students in the masculine category increases while the percentage of students in the feminine category decreases over the college years. Lyons and Green (1988) were only able to support the decline in the number of students in the feminine category. However, Lyons and Green only used female subjects. Thus, interpretation of these two studies must be done carefully. Overall it appears that there is fairly consistent and strong support for the idea that additional college experience is related to more egalitarian sex roles.

A final area of education is the anticipated level of educational accomplishments for the subject. As suggested by Morgan and Walker (1983),

women who are the most supportive of sex role egalitarianism should be those who have alternative rewards available to them. . .and are likely to be young, well educated, employed, and have feelings of personal competence. (p. 148)

They proposed that this hypothesis was based in exchange theory. According to exchange theory, people make decisions or change attitudes based on cost-benefit considerations. Situation are judged based upon the amount of rewards offered or the number of costs encountered. A decision is then based on the bottom line of the mental tally sheet. Hence, additional college achievement that is looked upon as increasing a person's potential rewards will be viewed positively, while the costs of the alternative roles available (e.g., wife/mother) will also be taken into account, valued or devalued, and a decision reached. If the value of the career wife/mother is found to hold more rewards, and the role of wife/mother is found to hold more costs, it is anticipated that the person would opt for higher rewards, and thus higher levels of education (which increase the changes of higher occupational skills as well). Therefore, anticipated educational level is hypothesized to be related to personal sex roles.

The research available indicates support for the exchange theory prediction of egalitarian attitudes being

associated with higher levels of anticipated educational achievement. Alper (1973) found that women who were labeled as more feminine on the Wellesley Role-Orientation Scale (WROS) were less likely to be planning a graduate school education or a career. Martin and Light (1984) found that for both male and female college students, scores on the BSRI indicated that students classified as more masculine were more likely to desire higher levels of education after completing college. This finding is also supported by the work of Zuckerman (1981) who found that for both males and females, those that reported anticipating higher levels of education (also higher career goals) scored higher on the AWS, which reflects attitudes towards feminism. Hence, all research to date supports the notion that educational goals are related to personal sex roles.

All three aspects of education, parental educational levels, personal educational levels, and anticipated educational goals are apparently related to personal sex roles. Overall findings for the area of education and sex roles are generally supportive, but several problems were also noted and discussed. Some of the findings are inconsistent, especially in the area of parental educational effects. Additional work in all three areas is warranted in order to clarify the conclusions.

Maternal Employment

The number of married women with children both preschool and school age that have entered the work force over the last several decades has been dramatic. Recent estimates (U.S. Department of Labor, 1987) indicate that at least half of today's mothers are in the labor force. The employment of married women with children results in effects similar to divorced households in that both households may require family role restructuring. Because of this potential role restructuring, children's perceptions of sex roles could be affected. Broverman et al. (1972) suggested that the perception of sex roles is

influenced by the degree of actual role differentiation that one experiences in one's own family. Maternal employment status appears to be central to the role differentiation that occurs between parents. If the father is employed outside the home while the mother remains a full-time homemaker, their roles tend to be clearly polarized for the child. But if both parents are employed outside the home, their roles are more likely to be perceived as similar. (p. 73)

Employment of the mother necessarily implies less time for domestic jobs. Hence the father will in all likelihood increase his share of the domestic responsibilities and thus alter the traditional masculine sex role (Marantz & Mansfield, 1977). However, empirical research does not substantially support this position. Time estimates of husbands' domestic work when their wives are employed full-time ranges from four to six hours per week, which only represents 14 percent of the total time spent on household

chores (Bernardo, Shehan & Leslie, 1987). Furthermore, the increase in husbands' household work was estimated to have increased only 1.5 hours when the wife went to work (Barnett and Baruch, 1983). Hence while a mothers entry into the work force is likely to affect perceptions of women's sex roles, due to her role restructuring, the perception of male sex roles may not be substantially altered.

Due to the apparent importance and potential impact of the effects of maternal employment on sex role formation in childhood, it is not surprising that there is a fair amount of literature in this area. And, while the majority of studies agree that maternal employment is associated with less traditional sex roles (Hoffman, 1974), there are nonetheless studies that report no effects.

Kiecolt and Acock (1988) suggest three reasons for these discrepant findings. The first reason is that studies vary in their choice of dependent variables and hence may not be comparable. The second reason is due to differing subject populations. While most studies utilized college freshman, this area studied children as young as two due to the early formation of sex roles. Some research had suggested that sex roles are not static, but rather the amount of traditionalism exhibited varies with the age of the subject (Urberg, 1979). Therefore, comparisons between studies without accounting for subject age may produce apparently contradictory findings.

Finally, the work in this area has not paid enough attention to the timing of maternal employment. Studies frequently simply dichotomize maternal employment into "Yes, mom works" or "No, mom doesn't work." How long the mother has been in the labor force is not accounted for nor is the age of the subject when the mother joined/returned to the labor force. Researchers have suggested that there are two important time frames for sex role formation. The first is before the age of six, when sex role identity is forming (Weinraub et al. 1984). The second is during adolescence, when the self-concept is being restructured (Streitmatter, 1985). Hence, the timing of maternal employment could be crucial in interpreting the findings of each study.

Research supporting the impact of maternal employment on the formation of less traditional sex roles is abundant. Beginning with subjects as young as two and three year of age, Weinraub, et al. (1984) found that their subjects were less aware of sex differences in toy preferences the more hours the mother worked outside the home. Female subjects between the ages of five and eleven were found to assign personality traits in a more egalitarian manner if their mother worked (Marantz & Mansfield, 1977). Kiecolt and Acock (1988) found that female subjects aged six and sixteen devalued the traditional female sex role if their mothers worked. Additionally, the teenaged females believed in greater equality for women. Ten-year-old boys and girls

with employed mothers were found to differentiate less between the sex roles of males and females in terms of traits, behavior, jobs and authority relations (Gold & Andres, 1978). Adolescents between 14 and 18 that came from dual-career families had more egalitarian views than adolescents from either single-earner or dual-worker families. This finding was echoed by Gardner and LaBrecque (1986) whose subjects were 17 to 18 years old. Hence during childhood and adolescence there is evidence that maternal employment is related to sex role development.

Employing college students as subjects confirms the finding of less traditional sex roles when mothers are employed. Vogel, Broverman, Broverman, Clarkson, and Rosenkrantz (1970), and Meier (1972), found that males and females held more traditional sex roles if their mothers were not employed. Tomeh (1979), repeated these conclusions, but only for male subjects while Broverman et al. (1972) concluded that female subjects were more affected than males. Thus there appears to be some discrepancy in the findings of older subjects regarding the impact of maternal employment. Again the resolution of this discrepancy could be determined based on the dependent variables employed and investigation of the timing of maternal employment as suggested by Kiecolt and Acock (1988).

There is also research which does not support the existence of a relationship between personal sex role and maternal employment. Using college students as subjects, Keith (1988) reported that maternal employment did not directly impact the sex roles of students. Keith found that maternal employment was not a factor of any great consequence in predicting personal sex role scores based upon multiple regression analysis. Weeks, Wise, and Duncan (1984) also concluded that the sex roles of daughters are not related to their mothers' employment. Analyses of variance conducted on the daughter's sex role attitude scores indicated no significant difference between daughters of homemakers, homemaker plus part-time employment, homemaker plus full-time employment, and career woman plus some homemaking. Therefore, there are studies that show no differences based on maternal employment, as well as studies that show effects for both males and females. Due to the complications involved in operationalizing the variable of maternal employment, continued work in this area is warranted.

Divorce

The traditional family structure consisting of an employed husband, a housewife, and children appears to be a thing of the past. According to the U.S. Bureau of Census (1987), the American divorce rate tripled between 1960 and

1980. During the 1980s the divorce rate then stabilized resulting in over one million new children experiencing parental divorce or separation each year. Currently 13 million or 23% of American children live in single-parent households. Of this group, 89% live with their mothers. Yet these statistics do not tell the whole story. Approximately 66% of divorced parents remarry (Glick & Lin, 1987). Remarriage of divorced parents has resulted in an upsurge in the number of step-families. Current estimates (Glick, 1989) suggest that over 17% of American households are comprised of step-families or blended families. The new wave of family structuring be it single-parent, step-parent, or blended family, will certainly impact the development of personal sex roles. Yet there is to date very little empirical work in the area of the effects of divorce on sex role development.

Two major theories have attempted to explain the potential impact of divorce on sex role development. The hypothesis behind the research in this area is that divorce will lead to more egalitarian sex roles for all of those involved, parents and children. The first theoretical explanation comes from social learning theory and has been labeled the "father-absence hypothesis" (McLanahan, 1985). Social learning theory postulated that sex roles are learned through identification or modeling of the same sex parent. In most cases (89%) when a divorce occurs the mother

receives custody of the children (U.S. Bureau of Census, 1987). If the children are still quite young (under six years of age), it has been suggested and empirically supported (Hetherington, 1966) that boys will become more dependent, less aggressive and less masculine in their sex roles due to the loss of a male role model. Girls, on the other hand, tend to be influenced very little due to the continued presence of their mothers. However, there may be a delayed effect in terms of the way she relates to males later in life (Hetherington, 1972). In addition, "fathers are particularly important for inculcating gender-role orientations because, compared to mothers, they vary their behavior more by sex of child and urge greater conformity to traditional gender roles" (Kiecolt & Acock, 1988, p. 710).

The father-absence hypothesis would suggest that by default researchers should investigate the sex role attitudes of the mothers since for the most part they will be in charge of the socialization of the children after a divorce (MacKinnon, Stoneman & Brody, 1984). Again, however, the notion of father-absence needs to be tempered. As stated earlier, most divorcees remarry (Glick & Lin, 1987). Further, remarriage occurs rather quickly. Approximately 50% remarry within three years (London & Wilson, 1988). And father-absence effects could be lessened if the divorced mother has male figures such as boyfriends or fathers who influence the childrens' development. Thus,

the father-absence hypothesis may be overemphasized in the literature.

The second major theoretical position comes from sociological role theory and has been labeled the role restructuring hypothesis (Brown & Foye, 1984). Due to the divorce there is a different family structure which requires a reassignment of duties and responsibilities. Children as well as the custodial adult will be required to take on more household tasks. The result is that the children see as well as participate in a variety of tasks which do not fit the traditional sex role stereotypes for behavior. As such, the parent serves as a role model displaying nontraditional behaviors which the children will incorporate into their own sex roles. Hence the custodial parent who undertakes both masculine and feminine tasks should serve to lessen the traditional sex role stereotypes of the children.

An examination of the available evidence on the effects of divorce on sex role development should help to clarify which of these two theories is more applicable. Unfortunately, there is very little evidence from which to draw any firm conclusion in this area. In general, the evidence to date appears to point to a weak but generally positive correlation between divorce and sex role egalitarianism. A very small but positive relationship was found by Thornton and Freedman (1979) between divorce and sex role egalitarianism. Unfortunately, a longitudinal

follow-up of this data (Thornton et al., 1983) completed 18 years after the original study was unable to distinguish whether "divorce had no influence on sex-role attitudes or if its effects were countervailing" (p. 224).

In addition to this methodological problem, it was suggested by MacKinnon et al. (1984) that the personal sex role change to egalitarian was not because of the divorce per se, but rather because of the additional roles that the mother must take on, most dramatically that of family breadwinner. Their research then attempted to sort out the effects of divorce from the effects of maternal employment. Findings from this work indicated that the most important factor for children ages three to six was marital status. Children from divorced homes with working mothers had less awareness of traditional sex role behaviors for both their own sex and for the other sex, when compared to children with still married working mothers. Hence it appears that for young children divorce does play a factor in sex role formation.

Adolescents were studied by Kiecolt and Acock (1988) in order to determine the effects of family structure on sex role attitudes. Their results showed a mixture of effects. Adolescents living with mothers following a divorce were found to have more egalitarian attitudes toward women in politics. Females in stepfamilies also hold these beliefs, while males in stepfamilies have more traditional attitudes.

A study by Richmond-Abbott (1984) found that both mothers and children in divorced homes held very liberal sex role attitudes. However, there was no comparison group to detail the magnitude of these liberal attitudes. It is interesting to note, however, that while attitudes were labeled as liberal, in-home behaviors were typically sex role stereotyped. Richmond-Abbott found that 90% of the toys given to the children were sex typed, and the chores given to the children were also typically sex typed. Thus, while attitudes are becoming liberalized, behaviors remain stereotyped.

Overall conclusions for the area of divorce are equivocal. However, there does seem to be a weak but positive relationship between sex role egalitarianism and the divorce experience. In terms of theoretical interpretations it is likely that neither of the previously discussed theories is sufficient alone, but rather that both are correct since they are not mutually exclusive. The work of Kiecolt and Acock (1988) appears to support the father-absence hypothesis since males and females were differentially affected depending on whether their family structure was divorced and mother-headed or step-parented. The results of MacKinnon et al. (1984) also supported the father-absence hypothesis based on the fact that the children were less aware of appropriate sex role stereotypes. Boys were less aware of their own sex roles

and the girls were less aware of male sex roles, thus implying the necessity of a father to indoctrinate the children into the appropriate or at least stereotypical roles.

The work of Richmond-Abbott (1984) supported the role restructuring hypothesis as the sex roles of both mothers and children were quite liberal, especially in the area of family roles. Also, no detrimental effects for the male children were noted which is a main feature of the father-absence hypothesis. Therefore, support for both theoretical viewpoints can be found even though the literature in this area is scant. Due to the shortage of studies in the area of divorce and the tremendous increase in divorcing families it seems imperative that researchers continue to explore the effects of this phenomenon on the personal sex roles of both children and adults.

Religion

The empirical work on the relationship between personal sex roles and the impact of religion is also scant. Frequently studies refer to the impact of religion as a side issue, only one of many variables that are investigated within the research framework. Yet, recent work in the area has shown that religion is of substantial importance in accounting for the variation in sex role attitude scores (Brinkerhoff & MacKie, 1985). In fact, both Wilson (1978)

and Ruether (1974) claim that religion is probably the most important influence in shaping and in enforcing sex roles, especially female sex roles. Therefore, a review of the available current research concerning the impact of religion on personal sex roles will be undertaken.

In order to understand the potential impact of religion on personal sex roles religion must be defined. A general definition is needed as well as an examination of the operational definitions employed in different studies. Religion has been defined as "a combination of beliefs, values, and behaviors which provides an overall worldview" (Brinkerhoff & MacKie, 1985, p. 416). Employing this rather broad definition it becomes possible to see how religion may be drawn into several aspects of social life. Since religion affects values, beliefs, and behaviors, it has been suggested by Mason and Bumpass (1975) that membership in groups espousing social values is likely to affect sex roles more than purely demographic variables such as marital status. Thus, the value structure of the religious denomination can be expected to affect the sex role of the participant.

It is also necessary to examine operational definitions of religion in order to comprehend the research and its various findings. One of the functions of operational definitions is to untangle apparently contradictory research results. When investigations conclude "yes," "no," and

"sometimes, sort of" it is often helpful to go back and examine how the variable was operationalized. Within the realm of religion there appears to be two commonly used operational definitions 1) religion as defined by the denomination to which one belongs, and 2) religion defined as religiosity indicating the amount of religious practice in which one engages, or self-perceived religiosity defined by such questions as "I consider myself to be a very religious person and I attempt to live my religious conviction daily," or "I do not believe that there is any truth in religion." With such differing aspects of religion being analyzed it is not surprising that the literature is not in complete agreement as to the role that religion plays in sex role formation.

One of the earliest empirical investigations of sex roles and religion was completed by Meier (1972). Meier employed two measures of religion, denomination and religiosity (church attendance). Overall, subjects who reported "None" as religious denomination were rated as more egalitarian in their sex roles than those who reported a denomination. Further, subjects that attended church frequently scored considerably lower and were labeled as more traditional in their sex roles, especially female subjects.

Since Meier's study (1972), several other studies have incorporated the use of denomination with varying results.

No differences at all between religious denominations were found in the works of Mason and Bumpass (1975) and Tomeh (1979). Subjects indicating "None" were found to be the most egalitarian in studies by Brogan and Kutner (1976) and Brinkerhoff and MacKie (1985). The most revealing work in this area, however, indicated that there may be a shift in the differential impact of religious denomination over the last 20 years. Thornton et al. (1983) conducted a longitudinal study of sex roles and found that while denomination was not considered an important determinant in 1962, the retesting of subjects in 1977 and 1980 indicated that specific denominations have moved in separate directions. Those espousing Catholicism have become more egalitarian, while those belonging to more Fundamental Protestant denominations have become more traditional in their sex roles. Thus, the impact of religious denomination on sex roles is not static. This is most likely due to changing church doctrine which in turn influences the values and beliefs of the church members. Therefore, the area of religious denomination continues to be an area of interest for sex role researchers due to its changing influence through the years.

Another major operational definition of religion has been religiosity or the amount of time spent in religious activities. All of the studies that have employed this definition of religion have found significant results. As

previously stated, Meier (1972) found that increased attendance decreased egalitarian scores. Swatos and McCauley (1984) found the most pronounced effect for female subjects that attended at least weekly. Scores for these subjects indicated a much more traditional sex role, whereas male subjects appeared unaffected by the amount of religious practice. Finally, Thornton et al. (1983) found that over 18 years as church attendance increased respondents showed less movement towards egalitarianism, while respondents reporting infrequent attendance showed more movement towards egalitarianism. There appears to be a consensus in the literature concerning religiosity such that increased religious activity is related to increased traditionalism.

The other approach operationalizing religion as religiosity is concerned with finding out how important religion is to the subject. For example, Swatos and McCauley (1984) labeled their religiosity variable as "self-perceived religiosity." Subjects answered four questions regarding their own perceptions of the importance of religion in their own life. Swatos and McCauley's results showed that for women, higher self-perceived religiosity was related to higher sex role traditionalism. Mason and Bumpass (1975) tested the same concept employing only one question "Quite apart from attending religious services, how important would you say religion is to

you---very important, fairly important, or unimportant?" (p. 1217). These authors concluded that religiosity had a modest effect on sex role traditionalism. Again, religiosity defined as self-perceived religiosity affects personal sex roles, with those that indicate religion as more important showing more traditional sex roles.

There is also a miscellaneous category of religiosity. Larsen and Long (1988) operationalized religion in terms of religious orthodoxy and religious fanaticism. Both of these definitions proved to be positively related to traditional sex roles. The most hybrid design of religiosity came from the recent work of Brinkerhoff and MacKie (1985). These authors combined the ideas of religious belief and religious behavior into one category of religiosity. Brinkerhoff and MacKie found a very strong relationship between religiosity and sex role traditionalism with religiosity accounting for 22.3% of the variance in their sex role measure. Hence again, religion operationalized as religiosity even in a variety of ways seems to exhibit a very robust effect on personal sex roles.

Overall, the findings of the relationship between religion and personal sex roles appears to be very strong. This relationship holds even though the subject populations vary between studies, the measures of sex role vary, and the time period of the studies varies from the early 1970's to the present. Religiosity appears to be the most powerful of

the potential operational definitions of religion, while denomination is the most troublesome.

It has been suggested that there are several explanations for the difficulty involved with the use of a denominational definition (Brinkerhoff & MacKie, 1985). Studies will generally vary in their specificity of denomination from broad categories such as Protestant, Catholic, Jewish, to very specific categories such as Baptist, Orthodox Jewish, Greek Catholic. The lumping together of several different denominations into a few categories invites substantial variation into the results which may render the categorizations useless. Also, it is important to clarify whether the response to denomination is based on current practices or childhood rearing. One may have been raised a Catholic for 18 years, but may not be currently identifying with the Catholic Church.

Finally it should be noted that church doctrine is not static. New interpretations that affect member's beliefs and values are mandated by the church hierarchy continuously. One of the most controversial doctrine changes has a direct effect on personal sex roles. Some denominations have decreed that women may hold positions of authority in the church and may even become ministers or priests, while other denominations have tenaciously held to their positions of women as subordinate to men in all aspects of religion (as well as other social roles). Thus

the effect of denomination offers many difficulties for researchers, especially in light of the changing church doctrines. Even with the difficulties of, and many definitions for religion, it appears that the area of religion and its effect on personal sex roles is still an important research domain due to the robust effects the research has noted to date.

Summary

The family is the major socialization agent in a child's life. The family background will delineate the roles for each of the family's members. Therefore, family roles will be affected based on whether the family is intact, divorced, or blended. Additionally, the mother's employment status will affect not only her domestic roles, but those of other family members as well. Family members' roles are also a function of other socializing experiences such as level of educational achievement and religious activity. The variation in roles displayed by family members serves as models of different personal sex roles. It is not surprising that children from homes with nontraditional families are found to acquire more egalitarian personal sex roles. While the results from the areas of education, maternal employment, divorce, and religion are not completely consistent, there is a considerable body of evidence that each area affects the sex

roles of the children raised in these differing family environments.

Sex Role Stereotype and Sex Role Orientation Ratings

It has been suggested by Eagly (1987) that stereotypes are the basis of person perception. Eagly elaborated on three aspects of stereotypes. First, a stereotype must reflect a consensus among people regarding behavioral expectations. Second, people must be aware of these expectations. And finally, these expectations must be believed to be appropriate for members of the group about which the stereotype is formed. Personal stereotypes allow for efficiency of processing information about others since evaluation can be done quickly due to the already established category (i.e., stereotype) which is easily accessed.

T. L. Ruble (1983) differentiated between sex role stereotypes and sex role orientations. When requesting subjects to rate the traits, characteristics, or behaviors of the "average" or "typical" person, T. L. Ruble interpreted the findings as reflective of sex role stereotypes. If the request was to rate the "ideal" or "desirable" person, T. L. Ruble interpreted the findings as reflective of sex role orientations. Sex role stereotypes, then, are personal perceptions of reality, while sex role

orientations are desires for the way one wishes reality to be.

Surprisingly, there has been little research investigating the existence of the sex role stereotypes that each sex holds concerning the other. The perceptions that members of each sex have concerning the other are "thought to be important determinants of individual and interpersonal behavior" (Fabes & Laner, 1986, p. 130). Due to the major impact these perceptions may have on interpersonal relationships it seems appropriate that these beliefs be studied.

Along the same line of reasoning it is equally important for the sake of interpersonal communication to have an understanding of sex role orientations. If there is a consensus on male orientations and the female orientations it would be helpful to understand them in order to adjust one's behavior to fit the specific situation. Due to the fact, however, that sex role orientations are opinions, it is quite likely that there is no strong consensus concerning the traits and behaviors that make-up these roles.

Discrepancies in Sex Role Stereotype Ratings

Attitudes about sex role stereotypes are most frequently requested by asking experimental subjects to "rate the typical male/female." As previously stated, there is surprisingly good interrater agreement when this

procedure is undertaken. Yet the agreement reflects the finding of major differences between male and female stereotypes. T. L. Ruble (1983) utilized the PAQ as his sex role measure and found that males differed from females on 53 of the possible 54 traits. Spence et al. (1974) and Rosenkrantz et al. (1968) also found extensive differences between male and female sex role stereotype ratings. These findings may lend support to the statement by Borges, Levine, and Naylor (1982) which suggested that when typical ratings of the sexes are requested, both the magnitude and the number of differences between the sexes are exaggerated. However, the only way to justify this statement is to compare stereotypical ratings to self-ratings of sex roles. Self-ratings of sex roles are considered accurate, valid measurements of personal sex roles by both Spence et al. (1975) and Borges et al. The problem that Borges et al. investigated dealt with stereotypical ratings. "Even though self-ratings may be assumed to be a valid measurement, it does not necessarily follow that projected ratings of the typical male or female are also veridical" (Borges et al., 1982, p. 407).

The purpose of the Borges et al. (1982) investigation was to compare typical ratings of sex roles to self-ratings of sex roles. "To the extent that respondents' projections agree with the projected groups' self-ratings (assumed to be valid descriptions), their projections can be considered

veridical and pragmatically useful" (Borges et al., 1982, p. 408). Using the AWS as the sex role measure the authors found matches on the typical and self-ratings of females on four of the six subscales. Therefore, the female typical ratings were found to be accurate (as defined by self-ratings). On the other hand, no matches were found on the typical and self-ratings of males for any of the subscales. The typical male was rated much more traditional by both males and females than the male self-ratings indicated. Therefore, Borges et al. concluded that "in general, both sexes were found to have a fairly accurate perception of women's attitudes, but both sexes consistently perceived the typical male as more conservative than the male self-rating justified" (Borges et al., 1982, p. 406).

A study conducted by Kaplan and Goldman (1973) which was performed nearly ten years prior to the work of Borges et al. (1982) found contrasting results. Kaplan and Goldman found that typical females were rated highly traditional by males and nontraditional by females. Thus, a comparison of these two studies suggests that a change in the perception of female sex roles has occurred. Both males and females were better in touch with female sex roles in the Borges et al. study than they were in the earlier Kaplan and Goldman study. Kaplan and Goldman did not test the perception of male stereotypes, hence, no comparison over time was possible. Thus, while recent work indicates that the female

stereotype closely reflects the female self-ratings, the male stereotype does not reflect the male self-ratings.

A possible explanation for the differential understanding of male and female sex role stereotypes may be due to the women's movement of the 1970s. Members of the women's movement brought to light many of the problems women face. Hence, the coverage of these cultural sex role changes has led to a greater understanding of the female role in American culture. The women's movement appears, however, to have had little effect on the understanding of the male sex role. Pleck (1981) describes the changes in male sex role research. Pleck states that while male behavioral norms have changed, traditional male sex role stereotypes remain. The lack of work in this area, the lack of understanding of the male sex role, and the importance this area holds for interpersonal interactions all indicate that further work on sex role stereotypes is warranted.

Gender Differences in Sex Role Orientation Ratings

Sex role orientations reflect personal opinion. Perhaps because of this opinion based perception the literature in this area has mixed results (Scher, 1984). Orientations of men and women have been defined as sex typed, traditional, androgynous, and egalitarian. The mixed results cannot be explained as simple attitude shifts brought on by cultural change, because even the most current

research has shown mixed results (e.g. Hock & Curry, 1983; T. L. Ruble, 1983). In fact, while some would predict that sex role orientations are moving towards becoming more egalitarian, Shaffer's (1985) review of the literature concluded that "several recent studies indicate that young adults of both sexes still endorse many traditional standards of masculinity and femininity and prefer other members of their own and the other sex who conform to these stereotypes" (p. 517). So it does not appear that there is a clear trend in sex role orientations at this point in time. Additionally, it appears that there may be an effect based on the sex of the rater with males being somewhat more traditional in their sex role orientation ratings and females being more androgynous in their sex role orientation ratings. Hence, an examination of these results is warranted.

There are several studies that indicated that sex role orientation ratings are sex typed. Urberg and LaBouvie-Vief (1976) and Urberg (1979) both used subjects ages 12, 17, and adult and found that orientation ratings were typically sex role stereotyped. T. L. Ruble (1983) employed college students and also found that while orientation ratings were less traditional than typical ratings, females were still desired to be more expressive and males were still desired to be more instrumental. Finally, Silvern and Ryan (1983) also found that the males' orientation ratings of females

were feminine and the females' orientations ratings of males were masculine. All four of these studies used both male and female raters and all four studies agreed that the preferred person should be sex typed.

Additional studies also concluded that orientations were sex typed, but in the following studies there were differences in orientation ratings based on the sex of the rater. In three studies (Deutsch & Gilbert, 1976; McPherson & Spetrino, 1983; Scher, 1984) only male raters preferred female orientations to be sex typed. Only one study could be located that indicated females prefer traditional male orientations (O'Leary & Depner, 1975). However, O'Leary and Depner did not describe the traits assigned to the males, only that these orientations reflected a traditional sex role.

Additionally, there are studies that showed sex role orientations as being androgynous, or at least less traditional. One study (Hock & Curry, 1983) employed both male and female raters and found that orientations were rated as androgynous. The interesting thing to note about this study was the age of the subjects, which was 12. Most studies done in this area employed college aged subjects, so perhaps the idealism of youth was evident, while the rest of the studies which employed older subjects were not as optimistic. Another interesting thing to note regarding these studies is that the majority utilize female raters.

Studies by Deutsch and Gilbert (1976), McPherson and Spetrino (1983), and Scher (1984) all found that male and female orientations were androgynous, only as rated by females. The odd study of the group was again by O'Leary and Depner (1975) whose sample indicated that the males' female orientation ratings were not only androgynous, but more like Wonderwoman, with traits such as exceptional competence, adventuresome, and very independent. Hence, less traditional orientations are desired by some, but the evidence as a whole is truly mixed. Again it appears that additional work in the area is warranted to try to sort out these different sex role orientations.

Summary

The areas of sex role stereotypes and sex role orientations are in need of additional research. There are few studies that explore the discrepancies between self-rated sex roles and sex role stereotype ratings. The area of sex role orientation has received more attention, but, the results of these studies show a lack of consistency. Several studies have indicated that orientation ratings depend on the sex of the rater, which is an intriguing result that bears further examination. It is possible that no strong consensus can be reached on sex role orientations since they are based on personal opinion. However, further work in this area would still be useful.

Statement of Hypotheses

The general purpose of this investigation is to explore three areas of sex typing. Personal sex roles will be examined in order to evaluate the existence of sex differences and the effects of family background. Sex role stereotypes will be examined in order to evaluate discrepancies between self-ratings and sex role stereotype ratings. And, lastly, sex role orientations will be examined in order to investigate differences in sex role orientation ratings based on the sex of the rater.

To accomplish these aims, an experimental design was developed that builds on T. L. Ruble's 1983 study and Brogan and Kutner's 1976 study. T. L. Ruble requested subjects to rate the sex role stereotypes and sex role orientations of male and female college students using the PAQ as the sex role measurement instrument. The present study incorporates T. L. Ruble's stereotypical and orientation rating scheme. The addition of a self-rating of sex roles completes the three sex role categories desired for this investigation.

The research design for this investigation extends T. L. Ruble's (1983) work by utilizing Brogan and Kutner's (1976) SROS as the dependent variable instead of the PAQ. As previously discussed, the PAQ tests psychological traits while the SROS investigates attitudes towards specific behaviors. The reason for the change in dependent variables is twofold. First, extension of T. L. Ruble's methodology

to another instrument that crosses domains (psychological traits to behavioral attitudes) would exemplify how robust the effects of sex roles actually are. Another reason for the change is due to the methodological as well as the practical problems involved with the use of traits, which was best stated by Canter and Meyerowitz (1984). Traits are hypothetical constructs that must be inferred from behavior. Therefore, each subject must decide the meaning and implication of each trait. A specific statement regarding for example, aggressive or emotional behavior would be more accurate and would be closer to operationally defining the variables. It would allow for less between subject variability since all subjects would be considering aggression or emotion under the same set of circumstances. Therefore, a measure of behavioral attitudes such as the SROS measures would make sex role differences more concrete than the abstractness of traits as measured by the PAQ. Additionally, this study replicates and updates Brogan and Kutner's 1976 results. It also extends their work to the areas of sex role stereotypes and sex role orientations as their original work only dealt with personal sex roles.

Investigation of the family backgrounds that could potentially affect sex role development will be studied by collecting relevant background data. Areas of interest are the affects of the educational level of parents and the individual's educational goals, maternal employment, marital

status of parents, religious denomination, and religiosity of the subject.

The final areas of investigation concerns the subject's sex role stereotypes and sex role orientations. The subjects' ratings of both sexes sex role stereotypes is of interest as well as the subjects' ratings of sex role orientations. Understanding in these areas would improve interpersonal relationships and hence would be of value. The specific hypotheses to be investigated follow.

Personal Sex Roles

The only continuously replicated finding in sex role research deals with the difference between males and females in personal sex role ratings. Male self-ratings consistently show more traditionalism than female self-ratings (Brogan & Kutner, 1976; Rosenkrantz et al., 1968; Spence et al., 1982; Storms, 1979). The effect of sex typing begins early with boys showing more awareness of sex roles than girls by age three (Weinraub et al., 1984). This continues in middle childhood (Richmond-Abbott, 1984), and through adolescence and adulthood (Urberg, 1979). These sex role differences extend beyond traits to behaviors as well, with males displaying more traditional or sex typed actions (Canter & Meyerowitz, 1984; Robinson & Follingstad, 1985). Thus, sex role differences between males and females are extensive. The following hypothesis is then offered.

Hypothesis 1: Males and females will differ on personal sex roles, with males displaying a more traditional sex role than females.

Sex Role Stereotypes and Sex Role Orientations

The basis for the next two hypotheses is T. L. Ruble's 1983 study which tested sex role stereotypes and sex role orientations in college males and females. T. L. Ruble employed the PAQ as the sex role measure and found that typical males differed from typical females on 53 of the 54 traits. Thus, T. L. Ruble concluded that sex role stereotypes remain strong. The orientation ratings of males versus females resulted in differences on only 12 of the 54 traits which allowed Ruble to conclude that sex role orientations were substantially less traditional and have shown changes over the last decade. Based on these results, the following two hypotheses are offered.

Hypothesis 2a: The male sex role stereotype will be rated by both males and females as more traditional than the female sex role stereotype.

Hypothesis 2b: The male sex role orientation will be rated by both males and females as more traditional than the female sex role orientation. Additionally, the difference between the male and female sex role stereotype ratings will be much greater than the difference between the male and female sex role orientation ratings.

Education

Education is regarded as having a liberalizing effect on social attitudes. Thus, an environment that emphasizes

educational attainments is likely to also emphasize more liberal social attitudes. The work investigating the effects of parental education on their children's sex roles has been inconsistent, yet the preponderance of evidence suggests that increased level of parental education is related to less traditional sex roles in their offspring (Kiecolt & Acock, 1988; Meier, 1972; Richmond-Abbott, 1984; Thornton et al., 1983).

Personal experience with higher education has also been noted to have a liberalizing effect on social attitudes. Results from several studies (Dreyer et al., 1981; Mason & Bumpass, 1975; Morgan & Walker, 1983) all indicated that more college experience was related to higher levels of sex role nontraditionalism. Furthermore, anticipated final level of educational achievement is also related to personal sex roles. Alper (1973), Morgan and Walker (1983), and Zuckerman (1981) all concluded that higher levels of anticipated education were associated with less traditional personal sex roles. Thus the following three hypotheses are offered.

Hypothesis 3a: The level of parental education will affect the subject's personal sex role such that the higher the attained educational level of the parent, the less traditional the sex role of the subject.

Hypothesis 3b: The year in college of the subject will affect the subject's sex role such that subjects with more college experience will perceive themselves as having less traditional sex roles.

Hypothesis 3c: The anticipated final level of the subject's educational achievements will be related to

the subject's sex role such that the higher the educational goal, the less traditional the sex role.

Maternal Employment

The effects of maternal employment on the sex roles of their children have been well documented (Hoffman, 1974). While the research is not in total agreement, the major finding is that maternal employment is related to less traditional sex roles in their children. Differential results between studies may in part be due to the timing of the mother's entry into the labor force. Two age periods are hypothesized to be of importance in terms of sex role formation. The first is before age six when gender identity is forming (Weinraub et al., 1984). The second age period is adolescence, when the self-concept is being restructured (Streitmatter, 1985). Therefore, the age of the child should be taken into account when considering the effects of maternal employment, such that children under the age of six and adolescents will be affected more than other age groups. Hence, the following hypothesis is offered.

Hypothesis 4: Subjects whose mothers are employed outside the home will have a less traditional sex role than subjects whose mothers remain at home. Furthermore, subjects whose mothers began/returned to work while they were below the age of six, or during adolescence will show more of an impact than maternal employment at other childhood ages.

Divorce

The family structure following divorce has been shown to have an influence on sex role development with divorce being related to egalitarianism, however, the relationship is not strong (MacKinnon et al., 1984; Richmond-Abbott, 1984; Thornton et al., 1979). Extrapolating from the research on maternal employment it is assumed that the younger the child is at the time of the divorce, the more nontraditional the sex role. Kiecolt and Acock (1988) did find differences in children as young as three, hence this appears to be an appropriate assumption. Based on these findings, the following hypothesis is offered.

Hypothesis 5: Subjects whose parents have divorced will have a less traditional sex role than subjects from an intact family. Additionally, the younger the subject at the time of the divorce, the more nontraditional the sex role.

Religion

It has been suggested (Ruether, 1974; Wilson, 1978) that religion is the most powerful shaper and enforcer of social values, especially sex roles. Religion has been operationalized in several ways, the most common of which are separation by denomination, and amount of time spent in religious activity (religiosity). Religious denominations have not shown consistent effects, in part due to changing religious doctrine over the years (Thornton et al., 1983). In general, religious denominations that are more

traditional are related to more traditional sex roles (Brinkerhoff & MacKie, 1985; Brogan & Kutner, 1976; Meier, 1972). However these results are not always supported (Mason & Bumpass, 1975; Tomeh, 1979). Religiosity has shown a more robust effect. Studies have consistently shown that increased religious activity is related to increased sex role traditionalism (Meier, 1972; Swatos & McCauley, 1984; Thornton et al., 1983). Therefore, the following hypotheses are offered.

Hypothesis 6a: Specific religious denominations that are more traditional (e.g., Catholic, Judaism) will be related to a more traditional sex role in subjects.

Hypothesis 6b: The amount of religiosity (time spent in religious activity) will be related to sex roles such that increased levels of religiosity will be related to increased levels of sex role traditionalism.

Discrepancies in Sex Role Stereotype Ratings

This area of investigation deals with how males and females evaluate the sex role stereotypes of each sex. Studies have shown agreement between male and female raters concerning stereotypical ratings (Rosenkrantz et al., 1968; T. L. Ruble, 1983). However, the accuracy of these stereotypes has been questioned. Borges et al., (1982) found that stereotypes of females were close to female self-ratings while stereotypes of males were not. Stereotypical males were found to be much more traditional than their self-ratings indicated. Therefore the following hypothesis is offered.

Hypothesis 7: Sex role stereotypes regarding females will not be significantly different when compared to female self-ratings. Sex role stereotypes regarding males will be significantly more traditional than their self-ratings.

Gender Differences in Sex Role Orientation Ratings

Sex role orientation ratings of males and females have yielded inconsistent results. Some studies report that orientations are sex typed while others report that they are androgynous (Scher, 1984). One of the findings that had been replicated was that the sex of the rater affected the orientation rating (Deutsch & Gilbert, 1976; McPherson & Spetrino, 1983; Scher, 1984). These studies all indicated that males preferred female orientations to be sex typed, while females preferred female orientations to be androgynous. Overall, however, the research in this area is not consistent; hence, the following hypothesis is offered.

Hypothesis 8: Sex role orientation ratings of males and females will vary depending on the sex of the rater. Orientations as rated by males will be more traditional, while orientations rated by females will be more nontraditional.

CHAPTER 3 METHODOLOGY

Subjects

The subjects consisted of 191 undergraduate college students from a midwestern state university. The age range of the students was 18 to 24 years, with a mean of 19 years, 11.9 months and a standard deviation of 1 year, 6.5 months. There were 67 (35.1%) freshmen, 41 (21.5%) sophomores, 43 (22.5%) juniors, and 39 (20.4%) seniors in the sample. The gender breakdown of the sample included 97 (50.8%) males and 94 (49.2%) females. Additional background data from each subject was obtained concerning familial variables dealing with the level of parental education, the subject's own anticipated educational goals, maternal employment, parental marital status, and religiosity.

Education

Parental educational achievements ranged from not finishing high school to graduate work, while anticipated level of educational achievement for the subjects was measured at the bachelor's, master's and doctorate levels. The maternal educational variable revealed 98 (51.3%) had completed at least some high school while 66 (34.6%)

completed at least some college and 27 (14.1%) completed some graduate work. The paternal educational variable demonstrated that 70 (36.6%) of the fathers completed some or all of high school, while 77 (40.3%) completed some or all of college, and 42 (22.0%) did some graduate work. The subject's own anticipated level of educational achievement indicated 98 (51.3%) believed they would complete a bachelor's degree, 71 (37.2%) believed they would complete a master's degree, and 21 (11.0%) thought they would complete a doctoral program.

Maternal Employment

Maternal employment was found to be quite prevalent. Of the 191 subjects, 163 (85.5%) indicated that their mother was presently working outside of the home. In addition to maternal employment data, information was also collected on the age of the children when the mother returned to or began working. The average age of the subject when their mother either returned to or began working was 9 years, 2.5 months with a standard deviation of 5 years, 4.9 months and an age range of 1 to 21 years.

Divorce

Of those responding, 133 (69.6%) were from married homes, while 47 (24.6%) were from divorced homes and 8 (4.2%) indicated a widowed parent. The average age of the

subject at the time of the divorce was 10 years, 2.6 months with a standard deviation of 5 years, 8.4 months and an age range of 1 to 22 years.

Religion

Religious denomination and its importance in the life of the subject was obtained by inquiring about the subjects' religious orientation and the amount of time spent in religious activities. The results indicated that 49 (25.7%) of the subjects labeled themselves as Protestants, 90 (47.1%) were Catholic, 5 (2.6%) were Jewish, 36 (18.8%) listed "Other" and 11 (5.8%) said "None". The amount of religious practice was delineated as once a week or more, once a month or more, once a year or more, or never. There were 70 subjects (36.6%) that responded with at least once a week, 40 subjects (20.9%) said once per month, 64 subjects (33.5%) said once per year, and 17 subjects (8.9%) said never.

Materials

Subjects began the testing session by answering basic demographic questions regarding age, sex, and year in school. They also answered further questions regarding familial influences such as parental educational status, maternal employment, parental marital status and religiosity. Subjects were then administered the Sex-Role

Orientation Scale (SROS, Brogan & Kutner, 1976) which consisted of 36 statements which were responded to based on a 6-point Likert-type scale (see Appendix). The statements reflected attitudes towards specific behaviors that dealt with such areas as division of labor in marriage, traditional sex based power structures, employment of women, political status of women, the socialization of children, and other stereotypical sex based behaviors.

The SROS was modified somewhat concerning the labels from which the subjects chose their answers. On each item the subjects were asked to decide whether they strongly agreed, moderately agreed, mildly agreed, mildly disagreed, moderately disagreed, or strongly disagreed with the statement. In order to guard against response sets, the SROS was designed such that 16 of the 36 statements were written to reflect a nontraditional format. For example, question 12 reads, "Marriage is a partnership in which the wife and husband should share the economic responsibility of supporting the family." Values between 1 and 6 were assigned to each response label with the values reversed (6 to 1) for questions regarded as nontraditional. Answers to all 36 statements were then summed. Hence scores for the scale ranged from a low of 36 (extremely traditional sex-role) to a high of 216 (extremely nontraditional sex-role).

Procedure

Originally, there were 199 subjects involved in the study; however, 8 subject protocols (4.02%) were discarded due to atypical subject age (over 24 years old), or because of incomplete data resulting from the use of a response set by the subject, or failure to answer each question which resulted in a lowering of the subject's total score and was therefore an unusable protocol. The sample was derived from a departmental volunteer subject pool designed to supply researchers and upper division classes with subjects. All subjects received extra credit for their participation in the study and were debriefed immediately following the completion of the testing session.

Half of the six testing sessions were run by a male experimenter and half with a female experimenter. This precaution was taken due to the possibility of experimenter bias playing a role since some subjects may view the female experimenter as violating stereotypical sex role behavior. The experimental procedure was also standardized in that both experimenters read from a script to assure that each session was handled identically.

Subjects began the one hour testing session by answering the demographic questionnaire. Then each subject answered the SROS a total of five times, each time with different instructions regarding whose attitude was being measured. For each subject the first set of answers to the

SROS concerned the subject's beliefs about his or her own attitudes. This order was assigned to give the subject a frame of reference for the following four administrations of the SROS. It was also deemed appropriate that the subject answer first about him or herself in order to rule out any potential biasing effects based upon the next four sets of answers. The next 4 times through the SROS the subject answered based upon 1) how typical it would be for a college male to possess each attitude, 2) how typical it would be for a college female to possess each attitude, 3) how desirable it would be for a college male to possess each attitude, and 4) how desirable it would be for a college female to possess each attitude. These final four administrations were counterbalanced to guard against any potential biasing effects.

CHAPTER 4

RESULTS

The results of the analyses will be presented in the same order as the hypotheses were presented. Following the discussion of the individual hypotheses multiple regression analyses will be presented in order to examine the relative influence of the family background variables versus subject variables on the personal sex role ratings, the sex role stereotype ratings and the sex role orientation ratings. Additionally, it should be noted that all initial analyses tested for the presence of interactions involving gender of subject and year in school. There were no statistically significant interactions for year in school and only one significant gender interaction. Thus the rest of the analyses are reported as main effects. Due to the use of multiple ANOVAs, the p-values have been adjusted to compensate for the increased probability of finding significant differences.

Although the final four administrations of the SROS testing for male/female sex role stereotypes and male/female sex role orientations were counterbalanced to guard against any potential biasing effects, analyses were undertaken to determine if there were order or fatigue effects. Analyses of variance using the order of test administrations (trials

2-5) as the independent variables and the male/female stereotype and orientation ratings as the dependent variables found no significant effects. Investigation of the means for each of the four dependent variables (see Table 1) across the order of test administrations showed no specific trends. That is, mean scores for each dependent variable showed no pattern of either increasing or decreasing across administrations.

In addition, bivariate correlations between the scores of the male/female stereotype and male/female orientation test administrations were examined for the presence of response sets. If the subjects employed response sets in providing answers to the successive test administrations, then the scores should exhibit strong linear relationships. Two of the six pearson correlations were not significantly different from zero at the .01 level. Out of the four that were significant at the .01 level, the strongest linear relationship was between the female sex role stereotype and the female sex role orientation with a correlation coefficient of .434. The correlation coefficient between the female sex role stereotype and the male sex role orientation was found to be above .40 as was the correlation between male sex role stereotype and male sex role orientation. With correlation coefficients between the test administrations under .5 and as low as .09, it is doubtful that the test scores were strongly influenced by response

Table 1

Order Effects Analysis

	Trial number			
Variable	2	3	4	5
Sex role stereotype:				
male	112.14	110.24	114.63	112.24
	F(3,166)=.15, p=.93			
Sex role stereotype:				
female	177.73	181.12	170.81	171.94
	F(3,157)=1.68, p=.17			
Sex role orientation:				
male	146.12	136.23	155.48	142.37
	F(3,162)=1.36, p=.26			
Sex role orientation:				
female	172.94	171.26	170.89	171.38
	F(3,157)=0.03, p=.99			

sets in the administration of the successive tests. Therefore, strong evidence that would suggest the existence of response sets, order effects and/or fatigue effects was not found in the sample.

Personal Sex Roles

Hypothesis 1: Males and females will differ on personal sex roles, with males displaying a more traditional sex role than females.

Hypothesis 1 was supported. Males and females were found to differ substantially in their degree of sex typing. Male self-ratings were more traditional than female self-ratings. The mean SROS sex role rating for males ($n = 93$) was 159.19, while the mean sex role rating for females ($n = 90$) was 188.21. The single factor ANOVA indicated a statistically significant difference between the two genders in their personal sex roles, $F(1,181) = 59.39$, $p < .014$.

Due to the 29 point difference in scores between males and females on personal sex role ratings an item analysis of the SROS was undertaken in order to pinpoint the specific areas of difference between males and females. Out of the 36 statements on the SROS, statistically significant differences were found on 32 of the items (see Table 2). However, univariate and multivariate tests of homogeneity of variances revealed that females were more similar in their responses than males. The populations of variances by sex were found to differ statistically for self-rated SROS

Table 2

Sex Role Orientation Scale: Item Analysis

Question	Males (n=93)		Females (n=88)		Differences in means (ranked cases=181)	
	Mean	SD	Mean	SD	F calc	Wilcoxon
1	4.419	1.440	5.125	1.303	11.9138 ^{***}	9215.0 ^{***}
2	4.559	1.658	5.409	1.090	16.4149 ^{***}	9327.0 ^{***}
3	5.086	1.148	5.591	.879	10.9402 ^{***}	9207.0 ^{***}
4	4.194	1.569	4.523	1.626	1.9213	8509.0
5	4.806	1.304	5.523	.884	18.4987 ^{***}	9366.5 ^{***}
6	4.925	1.296	5.534	.992	13.1597 ^{***}	9166.0 ^{***}
7	4.484	1.388	5.636	.746	47.6538 ^{***}	10053.0 ^{***}
8	3.914	1.659	5.261	1.317	36.3429 ^{***}	9909.0 ^{***}
9	4.570	1.410	5.591	.978	31.7112 ^{***}	9957.5 ^{***}
10	4.118	1.545	5.114	1.044	25.4912 ^{***}	9550.0 ^{***}
11	5.226	1.143	5.773	.739	14.4352 ^{***}	9267.0 ^{***}
12	5.129	.992	5.193	1.230	.1499	8428.0
13	3.473	1.434	4.091	1.219	9.7001 ^{**}	9031.5 ^{**}
14	4.355	1.592	5.330	1.036	23.5339 ^{***}	9476.0 ^{***}
15	3.118	1.601	3.545	1.781	2.8873	8538.0
16	4.118	1.443	5.318	1.045	40.6320 ^{***}	10018.0 ^{***}
17	4.516	1.427	5.386	.999	22.3625 ^{***}	9511.5 ^{***}
18	5.140	1.185	5.864	.406	29.5425 ^{***}	9553.0 ^{***}

Table 2--continued

Question	Males (n=93)		Females (n=88)		Differences in means (ranked cases=181)	
	Mean	SD	Mean	SD	F calc	Wilcoxon
19	5.108	1.202	5.920	.346	37.3071***	9614.5***
20	3.430	1.709	4.091	1.644	7.0112**	8911.0**
21	3.355	1.698	4.761	1.356	37.6497***	9911.5***
22	4.656	1.355	5.659	.725	37.9261***	9921.0***
23	4.774	1.423	5.455	1.038	13.3761***	9318.5***
24	5.054	1.346	5.784	.651	21.2000***	9369.0***
25	4.914	1.195	5.705	.664	29.8205***	9689.0***
26	3.355	1.639	4.864	1.332	45.8722***	10104.5***
27	4.067	1.693	5.364	1.041	38.1579***	9896.0***
28	5.032	1.255	5.784	.651	25.1644***	9471.5***
29	4.355	1.494	5.023	1.430	9.4205**	9220.5***
30	4.473	1.419	5.443	1.004	27.9087***	9684.0***
31	4.398	1.649	4.955	1.523	5.5481*	8929.5**
32	4.903	1.260	5.580	1.111	14.5996***	9527.0***
33	4.043	1.608	4.909	1.427	14.6252***	9333.5***
34	4.796	1.340	5.761	.758	35.0864***	9905.5***
35	3.194	1.498	3.591	1.595	2.9873	8598.5
36	5.151	.999	5.761	.743	21.5882***	9571.5***

Note. SROS scores range from 1 to 6. The higher the score, the more nontraditional the sex role orientation.

* $p < .05$. ** $p < .01$. *** $p < .001$.

scores with males having a greater dispersion: Cochran's $C(60,2) = .82$, $p < .001$, Bartlett-Box $F(1,41523) = 30.98$, $p < .001$, Box's $M(15,53077) = 3.18$ $p < .001$. Although this difference is of interest theoretically, it violates one of the assumptions for the use of analysis of variance. That is, the p-values of differences in means generated by the analysis of variance procedure were less than exact. Therefore a nonparametric test was conducted that tested the differences in means between the two populations based on less restrictive assumptions. Specifically, the Wilcoxon nonparametric test was utilized to test differences in the self-rated sex role scores by sex. Confirmation of statistically significant differences between male and female ratings on the same 32 of the 36 SROS statements was obtained. Comparisons between the p-values of the two procedures indicated that the p-values generated by the analysis of variance procedure were understated. It should also be noted that the same tests of homogeneity of variances were performed on the stereotype and orientation ratings. No significant differences were found on these ratings.

According to the SROS item analysis there were four statements on which males and females were not found to differ. Two statements were from the division of labor in marriage subsection (items 12 and 15), and two were from the miscellaneous behavior subcategory (items 4 and 35). Of

these four statements, two reflected a traditional attitude, while the other two reflected a nontraditional attitude. Respondents, both male and female, agreed that married women with preschool children should not work (item 15), and they disagreed with question number 35 which states that "there is no particular reason why a man should always offer his seat to a woman who is standing on a crowded bus." Thus there are still some traditional behaviors that are considered appropriate sex role actions.

There were also two statements that reflected a movement toward less traditionalism on the part of both men and women. Both sexes tended to agree (statement 12) that "marriage is a partnership in which the wife and husband should share the economic responsibility of supporting the family." Subjects tended to disagree with the idea that women more than men need to watch their figures and dress becomingly (item 4). Thus, there is agreement between the sexes on four statements, two reflecting traditional attitudes and two reflecting nontraditional attitudes.

Now that examination of the similarities between male and female sex role scores has been completed, a closer look at the differences between the sexes is in order. Investigation and evaluation of each of the 32 statements that separate males and females would be extensive and may not be necessary. As suggested by Larsen and Long (1988), one of the benefits of employing a Likert-type scale is that

"the Likert method provides an opportunity to assess both the cognitive component (various beliefs a person has about the attitude object) and the affective component (the variance in direction and intensity)" (p. 3). Larsen and Long's cognitive component reflects the difference between agreement versus disagreement with a statement. Larsen and Long's suggestion, then, is basically to collapse the 6-point Likert-type scale down into two categories, agreement and disagreement.

A comparison of male and female ratings was then undertaken by examining statements that break the barrier between 3- and 4-points. Scores rated 1 through 3 reflect agreement (depending on the wording of the item, recall that 16 SROS statements are worded nontraditionally in order to guard against response sets), while scores rated 4 through 6 reflect disagreement. Employment of this strategy indicated that while males and females differ statistically from each other on 32 of the 36 SROS statements, only 5 of these statements reflected a difference in agreement versus disagreement. The other 27 statements reflect differences in intensity of their response, but find both males and females in agreement (or disagreement) with the statement. An examination of the results from this point of view reflects a very different image. Instead of talking about differences on 32 of the 36 SROS items, differences in overall agreement/disagreement are found on 5 of the 36 SROS

items. Thus males and females are much more alike if differences in agreement versus disagreement with the statement are evaluated separately from differences in intensity of agreement/disagreement. This coincides with the results of Spence et al. (1974) who found that male and female subjects were on the same side of the midpoint for the vast majority of the PAQ traits, and thus, are more similar than different in self-perceived sex role traits.

The five SROS statements that show disagreement between males and females are from four of the six subcategories. Hence, there is no reason to evaluate the SROS based upon subcategories. Both similarities and differences on SROS items are spread across the different dimensions.

On all five of the SROS statements, women display more nontraditional behavioral attitudes than men. The statement that demonstrates the greatest difference between men and women is item 26 which states that "it is O.K. for a wife to retain her maiden name if she wants to." Males disagree (\bar{M} = 3.4) and females agree (\bar{M} = 4.9). Two other statements were close to this level of disagreement. A difference of 1.4 points was found on items 8 and 21. Item 8 reflects the husband's power over the wife in major decision making, while item 21 deals with allowing boys to play with dolls. The last two items deal with the use of obscene language by women (item 20), and the acceptance of a career promotion by a woman if it requires her family to move and her husband to

locate a new job (item 13). Overall, when SROS statements are evaluated based upon agreement/disagreement, females hold less traditional views than males in all areas of sex role behavior.

Sex Role Stereotypes and Sex Role Orientations

Hypothesis 2a: The male sex role stereotype will be rated by both males and females as more traditional than the female sex role stereotype.

Hypothesis 2a was supported by the subjects' stereotypical ratings of male and female college students' sex role behaviors. A repeated measures ANOVA was employed to compare the typical male and the typical female sex role ratings. As predicted, typical males were rated significantly lower ($M = 111.28$, $n = 150$) than typical females ($M = 175.81$), $F(1, 149) = 446.43$, $p < .014$. An interaction with sex of rater was found to be statistically significant. Females rated typical males more traditionally ($M = 104.8$), and typical females less traditionally ($M = 177.04$) than males ($M = 118.49$, $M = 174.45$, respectively), $F(1, 148) = 7.39$, $p < .01$. Yet the overall conclusion of male sex role stereotypes as more traditional than female sex role stereotypes was still supported.

Hypothesis 2b: The male sex role orientation will be rated by both males and females as more traditional than the female sex role orientation. Additionally, the difference between the male and the female sex role stereotype ratings will be much greater than the difference between the male and the female sex role orientation ratings.

Hypothesis 2b was supported by the subjects' orientation ratings of male and female college students' sex role behaviors. The male sex role orientation mean was 146.91 ($n = 145$). The female sex role orientation mean was 170.34. The difference between male and female orientation ratings was statistically significant based upon the results of a repeated measures ANOVA, $F(1, 144) = 39.50, p < .014$. Thus orientation sex role ratings of males and females indicated a preference for rating males more traditionally than females.

Additionally, as predicted, the magnitude of the difference between stereotype and orientation ratings was sizeable. The difference between male and female sex role stereotype ratings was 64.53. The difference between male and female sex role orientation ratings was 23.43, a difference of 41 points. Thus, while sex role stereotypes demonstrate extreme male/female differences, sex role orientations indicate more of a convergence in sex roles.

Education

Hypothesis 3a: The level of parental education will affect the subject's personal sex role such that the higher the attained educational level of the parent, the less traditional the sex role of the subject.

Hypothesis 3a was not supported by the data as neither the maternal nor the paternal level of educational attainment showed any relationship to the subject's personal sex role. Table 3 lists the descriptive statistics for the

Table 3

Sex Role Orientation Scores By Education Variables

	n	Mean	SD
Parental education			
Paternal			
High school	68	170.93	31.09
College	73	176.99	29.34
Graduate	40	171.93	26.07
Maternal			
High school	94	171.56	31.90
College	63	172.60	27.07
Graduate	26	182.62	22.91
Year in school			
Freshman	61	164.57	32.73
Sophomore	39	174.74	28.26
Junior	43	174.30	24.35
Senior	39	184.97	26.16
Anticipated education level			
Bachelor's	94	168.00	31.34
Master's	67	174.84	25.83
Doctorate	21	195.05	18.69

educational variables. The sex role ratings were consistent with the hypothesized pattern. Subjects whose mothers highest educational attainment was high school showed the lowest (more traditional) scores ($\bar{M} = 171.56$), and subjects whose mothers did some graduate work had the highest (more nontraditional) scores ($\bar{M} = 182.82$). However, statistical significance was not achieved, $F(2, 180) = 1.51, p=.23$.

The level of paternal education appeared to have no consistent effect on their offspring's sex roles. The means indicated that subjects whose fathers attended either graduate school, or only high school scored similarly (more traditionally), while those subjects with the highest sex role scores (more nontraditional) had fathers who completed at least some college, but did not pursue further academic achievements. Thus the ANOVA showed no statistical significance, $F(2, 178) = .834, p=.44$.

Hypothesis 3b: The year in college of the subject will affect the subject's sex role such that subjects with more college experience will perceive themselves as having less traditional sex roles.

The data supported hypothesis 3b. More college experience appeared to be related to the attainment of more nontraditional personal sex roles. The mean sex role score for freshmen was 164.57, while the mean sex role score for seniors was 184.97. This difference was statistically significant, $F(3, 178) = 4.111, p<.01$.

Hypothesis 3c: The anticipated final level of the subject's educational achievements will be related to

the subject's sex role such that the higher the educational goal, the less traditional the sex role.

Hypothesis 3c was supported by the data. Subjects indicated their anticipated final level of academic achievements as either a bachelor's, master's, or a doctorate degree. Subjects who believed they would only complete a bachelor's had a mean score of 168.00, while subjects who believed that they would ultimately complete a doctorate had mean sex role scores of 195.05. This finding was statistically significant, $F(2, 179) = 7.991, p < .014$. Thus, the greater the anticipated educational achievement, the more nontraditional the personal sex role.

Maternal Employment

Hypothesis 4: Subjects whose mothers are employed outside the home will have a less traditional sex role than subjects whose mothers remain at home. Furthermore, subjects whose mothers began/returned to work while they were below the age of six, or during adolescence will show more of an impact than maternal employment at other childhood ages.

Hypothesis 4 was not supported by the results of this study. Subjects whose mothers were not employed outside the home had mean sex role scores of 168.19 ($n = 26$), while subjects whose mothers were employed outside the home had mean sex role scores of 174.37 ($n = 157$). The difference of 6 points between the two groups, though in the predicted direction, was not statistically significant, $F(1, 181) = .994, p = .320$. Additionally, subjects whose mothers returned/began work when the subjects were under six years

of age ($n = 46$) had a mean sex role score of 178.98. Those subjects who were adolescents ($n = 23$) had a mean sex role score of 170.09. Subjects who were at other childhood ages when their mothers returned/began work had mean sex role scores of 172.08 ($n = 76$). This difference was not found to be statistically significant, $F(1, 143) = .643, p = .424$.

Divorce

Hypothesis 5: Subjects whose parents have divorced will have a less traditional sex role than subjects from an intact family. Additionally, the younger the subject at the time of the divorce, the more nontraditional the sex role.

Hypothesis 5 was supported by the results of the ANOVA. Subjects from divorced families ($n = 46$) had a mean sex role rating of 186.11. Subjects from intact families ($n = 127$) had a mean sex role rating of 170.12. The ANOVA indicated a statistically significant difference between subjects from divorced and married families, $F(1, 171) = 10.76, p < .014$. Thus, subjects from divorced families rated their sex roles as more nontraditional than subjects from married, intact families. Analysis of covariance controlling for maternal employment was still significant, $F(2, 176) = 5.077, p > .01$. Thus parental marital status and not maternal employment accounts for the differences in personal sex role scores.

The subject's age at the time of the divorce was related to the degree of sex role traditionalism. A Pearson correlation employing sex role scores and subject age at the

time of the divorce revealed $r = -.26$, $p < .05$. Therefore, the younger the subject at the time of the divorce, the higher or more nontraditional the subject's sex role rating.

Religion

Hypothesis 6a: Specific religious denominations that are more traditional (e.g., Catholic, Judaism) will be related to a more traditional sex role in subjects.

Hypothesis 6a was not supported by the results of this study. While there were considerable differences between the sex role scores of subjects espousing different religious denominations (see Table 4), the ANOVA indicated the differences were not statistically significant, $F(4, 178) = 1.639$, $p = .166$. It should be noted, however, that the mean sex role scores of subjects ($n = 174$) espousing a religious faith was 172.37, compared to a mean sex role score of 195.11 for subjects ($n = 9$) indicating no religious affiliation.

Hypothesis 6b: The amount of religiosity (time spent in religious activity) will be related to sex roles such that increased levels of religiosity will be related to increased levels of sex role traditionalism.

Hypothesis 6b was supported. The more time spent in religious activity the greater the sex role traditionalism. The means ranged from a nontraditional score of 200.71 for subjects who never participated in religious activity to a very traditional score of 164.69 for subjects who participate at least once per week. The ANOVA indicated statistical significance, $F(1, 179) = 6.95$, $p < .014$. A post

Table 4

Sex Role Orientation Scores By Religion Variables

	n	Mean	SD
Religion			
Denomination			
Protestant	45	176.13	27.58
Catholic	89	170.53	29.75
Jewish	5	166.80	28.58
Other	35	173.03	30.75
None	9	195.11	20.84
Religiosity			
Never	14	200.71	13.90
Yearly	63	176.78	24.91
Monthly	39	173.54	26.58
Weekly	67	164.69	32.96

hoc Scheffe test comparing level of religiosity indicated that the only group which significantly differed ($p < .05$) from the others was the group espousing no religious practice. Thus, lack of religious practice is related to sex role nontraditionalism.

Discrepancies in Sex Role Stereotype Ratings

Hypothesis 7: Sex role stereotypes regarding females will not be significantly different when compared to female self-ratings. Sex role stereotypes regarding males will be significantly more traditional than their self-ratings.

Hypothesis 7 was partially supported by the results of this study. The prediction of similarity between female sex role stereotypes and female self-ratings was not supported. The prediction of a discrepancy between male sex role stereotypes and male self-ratings was confirmed. Analysis of the data for this hypothesis was undertaken employing paired sample t-tests for same sex ratings, and t-tests for opposite sex ratings.

The self-rated female sex role mean score was 188.97. The mean female stereotype rating by females was 176.67 which was a statistically significant difference, $t(77) = 3.94$, $p < .014$. The male rating of female sex role stereotypes was 174.68, which was also significantly different from the females self-rating, $t(79) = 4.512$, $p < .014$. Thus, while males and females rated the female sex

role stereotype very similarly, both sets of ratings were lower (more traditional) than female self-ratings.

The self-rated male sex role mean was 160.16. The mean male stereotype rating by males was 119.58 which was a statistically significant difference, $t(80) = 10.84$, $p < .014$. The female rating of male sex role stereotypes was 105.33, which was also significantly different from the male self-rating, $t(87) = 12.13$, $p < .014$. Thus there was strong confirmation of the discrepancy between male sex role stereotypes and male self-ratings. Both males and females rated the male stereotype much more traditionally than males rated themselves.

Gender Differences in Sex Role Orientation Ratings

Hypothesis 8: Sex role orientation ratings of males and females will vary depending on the sex of the rater. Orientations rated by males will be more traditional, while orientations rated by females will be more nontraditional.

Hypothesis 8 was not supported. The sex of the rater had no bearing on the ratings of male and female orientations. Male sex role orientations received a mean rating of 141.24 from males ($n = 82$) and 149.09 from females ($n = 85$), which was not a statistically significant difference, $F(1, 165) = 1.353$, $p = .247$. Female sex role orientations received a mean rating of 167.42 from males ($n = 81$) and 175.05 from females ($n = 81$), which was also not a statistically significant difference, $F(1, 160) = 2.528$,

$p=.114$. Males and females both rated male orientations more traditionally than female orientations. Thus, sex of rater was not found to be important when rating sex role orientations.

Multiple Regression Analyses

Family Background Versus Subject Variables

Multiple regression analyses were employed to test the explanatory power of the family background variables versus the subject variables on the various SROS ratings. The independent variables that were utilized to explain personal SROS scores included the family background variables of parental education level, parental marital status, and religious denomination. The subject variables included in the model were sex of the subject, year in school, anticipated educational level, and religious practice. The statistical results for the personal SROS scores with the full set of independent variables are shown in Table 5.

All of the independent variables in the model were dichotomized. The year in school variable could be measured as a continuous variable (coded as 1=freshman, 2=sophomore, 3=junior and 4=senior), or as a series of dichotomized (0, 1) variables. The effect of coding the year in school variable as a continuous variable (e.g., 1, 2, 3, 4) is tantamount to assuming that the predicted personal SROS score changes at a constant rate from one year to the next

Table 5

Personal SROS Regression Results: Full Model

Independent variables	Unstandardized coefficient	Standardized coefficient	t-calc
<u>Family Background Variables</u>			
Maternal education			
Did not finish HS	-15.183	-.117	-1.299
Finished high school	---	(excluded category)	
Some college	-1.702	-.021	-.278
College degree	-1.370	-.014	-.165
Some graduate work	-1.210	-.014	-.150
Paternal education			
Did not finish HS	-24.339	-.187	-2.180*
Finished high school	---	(excluded category)	
Some college	.765	.010	.114
College degree	9.352	.125	1.365
Some graduate work	10.502	.128	1.233
Religious Denomination			
Protestant	---	(excluded category)	
Catholic	-6.653	-.109	-1.245
Jewish	-11.434	-.059	-.724
Other	-3.241	-.042	-.492
None	-9.105	-.070	-.746

Table 5--continued

Independent variables	Unstandardized coefficient	Standardized coefficient	t-calc
Parental marital status			
(divorced=1)	6.672	.144	1.856
Maternal employment	-7.192	-.082	-1.055
<u>Subject Variables</u>			
Sex (male=1)	23.274	.380	4.907***
Year in school			
Freshman	---	(excluded category)	
Sophomore	14.050	.184	2.153*
Junior	14.940	.207	2.345*
Senior	19.749	.280	2.965**
Anticipated education			
Bachelor's degree	---	(excluded category)	
Master's degree	7.591	.119	1.505
PhD	18.143	.202	2.527*
Religious Practice			
Once a week+	---	(excluded category)	
Once a month+	6.563	.093	1.079
Once a year+	2.828	.042	.472
Never	28.358	.289	2.948**
(Constant)	148.234		17.070***

Table 5--continued

Equation summary statistics

R ² =	.552	Calculated F =	5.137
Adj R ² =	.444	Signif F =	.000
Std error =	22.837	Degrees of freedom =	96

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

(Kmenta, 1971). The empirical evidence from the sample did not support that assumption. The difference in personal SROS scores between freshman and sophomores was 14.05 points, whereas the difference between sophomores and juniors was only .89 points and the difference between juniors and seniors was 4.81 points. Since the data did not support the linear assumption, the dichotomous variable approach was employed. None of the other independent variables were considered to be appropriate candidates for continuous variable coding schemes; hence all of the independent variables were dichotomized.

Subject variables were expected to explain significantly more of the variation in personal SROS scores than the family background variables. To test this hypothesis, two regression models were estimated for each of the five dependent variables. One of the equations contained only the subset of family background variables. The results for the personal SROS score dependent variable with the subset of family background variables are shown in Table 6. The incremental explanatory power of the subject variables was tested by comparing the results of the regression analysis with the subset of family background variables as independent variables versus the full model. The restricted regression model with only the family background variables explained 20.1% of the variation in personal SROS scores ($p=.036$). When the subject variables

Table 6

Personal SROS Regression Results: Family Background Variables Only

Independent variables	Unstandardized coefficient	Standardized coefficient	t-calc
<u>Family Background Variables</u>			
Maternal education			
Did not finish HS	-24.741	-.190	-1.777
Finished high school	---	(excluded category)	
Some college	-.498	-.006	-.065
College degree	-8.179	-.083	-.794
Some graduate work	.630	.007	.065
Paternal education			
Did not finish HS	-23.148	-.178	-1.675
Finished high school	---	(excluded category)	
Some college	5.142	.066	.644
College degree	11.770	.156	1.496
Some graduate work	3.155	.039	.317
Religious Denomination			
Protestant	---	(excluded category)	
Catholic	-4.607	-.075	-.685
Jewish	3.372	.017	.176
Other	-3.779	-.049	-.456
None	16.408	.126	1.297

Table 6--continued

Independent variables	Unstandardized coefficient	Standardized coefficient	t-calc
Parental marital status			
(divorced=1)	10.434	.225	2.407*
Maternal employment	-6.041	-.069	-.733
(Constant)	178.442		19.105***
Equation summary statistics			
R ² =	.201	Calculated F =	1.885
Adj R ² =	.094	Signif F =	.036
Std error =	29.155	Degrees of freedom =	105

Note. *p<.05. **p<.01. ***p<.001.

were added to the model, explanatory power increased to 55.2% ($p < .001$). The F-test of the significance of incremental explanatory power showed that the block of subject variables added a significant amount of explanatory power to the model ($F = 8.349$, $p < .01$). Thus, the block of subject variables were found to add significant explanatory power to the model.

Overall the results of the multiple regression were similar to the analysis of variance results. The exception was the marital status of the subject's parents. The ANOVA results showed significant differences with subjects from divorced families having significantly greater personal SROS scores. The multiple regression analysis showed that the marital status variable was not significantly different from zero at the .01 level; however, it was significant at the .10 level ($p = .067$).

Personal SROS Scores: Subject Variables

One of the common results found between the ANOVA and the full model regression was that females scored significantly higher than males on personal SROS scores. The estimated coefficient of 23.3 on the sex variable showed that females were estimated to have scored 23 points higher (more nontraditional) on personal SROS scores than did males. And the influence of the sex of the subject on the personal SROS score was statistically significant ($p < .001$).

Additional years of schooling also increased nontraditionalism in personal SROS scores. Seniors were estimated to have scored 19.7 points higher than did freshmen ($p < .01$), juniors scored 14.9 points higher than freshmen ($p < .05$), and sophomores were estimated to have scored 14.1 points higher than first year students ($p < .05$). So, the more years of schooling that a subject had, the more nontraditional their personal SROS score. This trend also held for the anticipated educational level of the subject. The higher anticipated education level was associated with higher (more nontraditional) SROS scores ($p < .05$). Subjects who anticipated completing a doctorate degree were estimated to have scored 18.1 points higher than those subjects who anticipated completing a bachelor's degree. Subjects who anticipated completing a master's degree were estimated to have scored 7.6 points higher than those aspiring to obtain only a bachelor's degree.

Subjects who reported no religious activity were estimated to have scored 28.4 points higher than those subjects who participated at least once a week. On the other hand, subjects who reported monthly or yearly religious activity did not have personal SROS scores that differed significantly from subjects who participated weekly. Thus, subjects who reported no religious activity had significantly greater (nontraditional) personal SROS scores ($p < .01$).

Personal SROS: Family Background Variables

The family background variables included dichotomized variables that quantified: parental education, parental marital status, maternal employment, and religious denomination. Of the fourteen family background variables, none were found to be significant at the .01 level and only one variable (paternal education - no high school) was found to be significant at the .05 level. This paternal education variable lowered the expected personal SROS score by 24.3 points (more traditional) for all subjects whose father did not finish high school. The parental marital status variable was marginally significant ($p=.067$) where all subjects whose parents were divorced were estimated to have a 6.7 point higher (more nontraditional) personal SROS score.

Personal SROS Scores: Relative Importance of Variables

The variable that appeared to have the greatest influence on personal SROS scores was the sex of the subject. The independent variable of the sex of the subject had the largest absolute standardized regression coefficient of .380 ($p<.001$). The sign of the standardized regression coefficient indicated that the predicted personal SROS score for females were higher (less traditional) than males. The standardized regression coefficient facilitated comparisons of the relative strengths of independent variables due to

the adjustment for differing units of measurement and different variability in the independent variables.

The variable with the second largest influence was the religious practice of subjects, namely that those who never attended religious activities had a standardized regression coefficient of .290 ($p=.004$). The subject year in school variables had the third largest influence with senior level and junior level students. Next was the anticipated education level for subjects who anticipated completion of a doctorate degree. And the last standardized coefficient that was significant at the .05 level or better was the only family background variable to have an influence. That variable was the paternal education variable that indicated the subject's father did not complete high school. There were no other family background variables that were significant at the .05 level or better.

Other Dependent Variables

Four other dependent variables that were tested in addition to the personal SROS scores included; subject ratings of sex role stereotypical males and females as well as sex role orientation ratings of males and females. Two regression models were again estimated for each of the four additional dependent variables. One of the regression models estimated was the full model with all family background variables included as well as the subject

variables. The other model that was estimated was the restricted model with only family background variables. This allowed for testing of the incremental explanatory power of the block of subject variables.

None of the full models tested were found to have significant explanatory power ($p > .01$). The statistical results also showed no significant explanatory power for the restricted models which included only the subject variables. None of the F-statistics testing the significance of the overall regressions for the restricted models were significantly greater than zero ($p > .01$). Due to the lack of explanatory power of the overall regressions, the individual regression coefficients that were estimated for each of the independent variables were not reported. Thus, the sample evidence of this study suggested that neither family background variables nor subject variables were important factors influencing subject ratings of sex role stereotypes or sex role orientations of males and females. Significant explanatory power was only found in explaining personal SROS scores.

CHAPTER 5 DISCUSSION

The results of this investigation are in need of closer examination and explanation. The existence of sex roles, sex role stereotypes and sex role orientations has been further documented by this work. While many of the results are consistent with earlier research and confirm the hypotheses set forth in this investigation, not all of the findings are consistent with the previous empirical research. Interpretations of all of the findings as well as a theoretical integration of these results will be undertaken. Examination of the problems encountered as well as future directions for this area will also be discussed.

Discussion of Hypotheses

Personal Sex Roles, Sex Role Stereotypes and Orientations

The first three hypotheses all dealt with the existence of male/female differences on personal sex roles, sex role stereotypes and sex role orientations. It was anticipated that males would be rated as more traditional than females in each of the three sex role categories. This overall finding was upheld across each category. The extensiveness of the differences between males and females was

demonstrated by the mean score differentials. On personal sex roles the mean difference in scores between males and females was 29 points. For sex role stereotypes the difference was 64 points and for sex role orientations the difference was 23 points. Thus, the pervasiveness of differential male and female sex roles across all three categories was once again documented.

In order to more closely examine the differences between self-perceived male and female sex roles, an item analysis of the SROS was completed. As previously stated, the results of this analysis showed that males and females differed on 32 of the 36 sex role statements. Several sets of researchers (e.g. Borges et al., 1982; Morgan & Walker, 1983; Thornton et al., 1983) have suggested that sex roles are not unitary, but have several different components or subcategories. They recommended an analysis of each category in order to determine where changes are occurring since total scores blur these potential distinctions. The SROS as designed by Brogan and Kutner (1976) has six subcategories as described in the Methods section. Because of the magnitude of the differences (32 of 36 statements) obtained in this study, a subcategory analysis of the SROS was deemed unnecessary. The item analysis demonstrated that the four items on which both male and female subjects agreed and the five items on which both male and female subjects disagreed came from several different categories. Thus, the

item analysis appears to be of more benefit than a subcategory analysis.

The item analysis revealed that there were four statements on which males and females did not differ. Within the two subcategories of the SROS, from which these four questions come (division of labor in marriage, and miscellaneous behavior), there is no clear direction of movement toward nontraditionalism. Each category has one question showing traditional attitudes and each category has one question showing nontraditional attitudes. So when married, both partners share the financial responsibilities until the children are born, at which time the woman is supposed to stay at home until they are in school. In terms of other sex role behaviors both men and women are supposed to watch their weight and dress attractively, but men should still give up their seats on the bus to women. Hence, an overall trend in the lessening of these sex role behaviors is not evident. Some behaviors are still strongly regarded as appropriate by members of both sexes, while other behaviors show signs of waning in their level of importance.

Even though the item analysis revealed sex differences on 32 of the 36 SROS statements, only five of the 32 items were examined. The reasoning for this was based upon the suggestion of Larsen and Long (1988) to split Likert-type scales into differences in beliefs, and differences in intensity of beliefs. Further support for the examination

of belief differences comes from Spence et al. (1974), who also found that for most of the PAQ traits, men and women had similar beliefs (i.e., they were on the same side of the scoring midpoint). Thus, examination of the five statements on which males and females disagreed was undertaken.

On all five of these SROS statements, the females were found to answer more nontraditionally than the males. The statements in question involved the subcategories of 1) power structure, 2) employment, 3) socialization of children, and 4) miscellaneous behaviors. Thus, the relatively few sex role behaviors that cause disagreements between men and women span a broad range of behavioral domains. Furthermore, women are less traditional than men in their sex role beliefs in each of these areas.

Sex role stereotypes and sex role orientations were the basis of the second set of hypotheses. The work of T. L. Ruble (1983) was extended beyond his use of the PAQ which tested for psychological traits, to the SROS which tested for attitudes about specific behaviors. The results replicated T. L. Ruble's findings of more traditional sex role stereotypes and orientations for males than for females. The results also replicated T. L. Ruble's conclusion that while differential sex role stereotypes remain strong, differential sex role orientations are less extensive. Thus, while males and females are perceived as being sex typed, they are preferred to be less sex typed.

T. L. Ruble's (1983) work demonstrated the pervasiveness of psychological traits and sex roles, while this work demonstrated the pervasiveness of behavioral attitudes and sex roles. Thus, the present extension of Ruble's work indicates that sex roles cross categories. Yet, Spence and Helmreich (1980) have stated that the PAQ appears to have little face validity and minimal construct validity. They concluded that the PAQ may not have any predictive utility for any other sex role phenomena. Based on Spence and Helmreich's criticism of the PAQ, replication of Ruble's work would be questionable. However, the present study does indeed validate the continued presence of sex role stereotypes and orientations in college students. Further, it extends the presence of sex roles, sex role stereotypes, and sex role orientations closer to actual behavior due to the use of a measuring instrument that tests for attitudes towards specific sex role behaviors rather than psychological traits.

Family Background

Due to the early development of sex roles, the family environment was hypothesized to strongly influence sex role outcome. Specifically, educational factors, maternal employment, divorce and religion were all hypothesized to influence the development of either traditional or nontraditional sex roles. The findings of this

investigation, surprisingly, demonstrate little support for the influence of differing family environments on the development of sex roles. Instead, current life involvements appear to be more influential in self-reported sex roles. Examples from the family background variables substantiate this conclusion.

Families that include highly educated parents, employed mothers, and less traditional religious orientations were hypothesized to lead to nontraditional sex roles in children. Also, families that had experienced divorce were hypothesized to transmit less traditional sex roles. None of these variables displayed a significant influence on personal sex role development. It should be noted that there was a difference in scores between subjects from divorced versus intact families with those from divorced families showing greater nontraditionalism. This difference was found to be statistically significant for the ANOVA, but not for the full model multiple regression analysis. A potential reason for the discrepancy between analyses may be found in the relationship between parental marital status and other independent variables. Parental marital status is significantly correlated with maternal educational level ($r = .122$, $p < .053$), the subject's year in school ($r = .123$, $p < .051$), and the subject's amount of religious practice ($r = -.21$, $p < .002$). Due to the very strong results based on the amount of religious practice, it would be hypothesized that

the interaction of parental marital status is eclipsed by the effects of religious practice. Since ANOVA evaluates variables individually, it is likely that the significant level achieved for parental marital status is due to its failure to account for this multicollinearity. The full model multiple regression analysis was able to evaluate the effects of parental marital status within a multivariate context, and hence found no statistically significant effect. Continued work in this area is advised, however, due to the discrepant statistical results.

There was no relationship between either maternal or paternal educational levels and personal sex role score. It was assumed that the liberalizing effect of higher education would be incorporated into family values, and hence, would lead to less traditional sex roles in the children. Past research has shown the effects of maternal educational level in particular on the development of sex roles in their children. A comparison of the findings of this study to the work of Brogan and Kutner (1976) indicates that there may be an overall societal liberalization of female sex roles. Daughters whose mothers attended college or beyond in Brogan and Kutner's sample scored similarly to the women in this sample. The difference was found in daughters of mothers who completed only a high school education. In Brogan and Kutner's sample of college females the mean scores were 159, while in this sample the mean scores were 171. Thus the

changes were at the lower end of the scale rather than the upper end. Hence, the effect of maternal education may have fallen victim to overall societal changes in women's sex roles.

Maternal employment was not related to the sex roles of their offspring. The lack of replication of previous work in this area may again be a response to societal changes. In this sample, 85.5% of the subject's mothers were employed outside of the home versus 38% in 1970 (Levitan and Belous, 1981) and 67% in 1980 (U.S. Department of Labor, 1987). This overwhelming percentage of employed women indicates that the mother role itself has changed and outside employment is now the norm rather than the exception. Not surprisingly then, maternal employment had no significant relationship to sex role development.

Religious denomination effects followed the same trend that the previous literature had documented with those espousing no religious affiliation scoring the most nontraditionally and those professing a particular denomination scoring the most traditionally. However, the differences were not statistically significant. The religion that one espouses is most likely rooted in the family upbringing and thus is considered a family background variable. The finding that religious denomination is not significantly related to personal sex roles again

demonstrates the lack of importance that should be assigned to family background variables.

Variables that do show effects on personal sex roles reflect a current influence rather than a family influence. The subject's sex, current and anticipated future involvement in education and religiosity are the most influential. The differences between freshmen and senior sex role scores was 20 points. Further, the difference between subjects anticipating a bachelor's degree versus those anticipating a doctoral degree was 27 points. The direction of both of these results indicates that higher educational levels are related to sex role nontraditionalism. Funk and Willits (1987) explain the liberalization effect based on the fact that, "both in and out of the classroom, the college student is likely to be exposed to new ideas, new people, and new environments, which would be expected to challenge his or her attitudes, values, and perceptions" (p. 224). The diversity of experiences coincides with an individuals' first real steps toward independence as the student has most likely left home, and is living on his or her own. Thus, the liberalizing effect on social values that higher education has been implicated as having is born out with regard to personal sex roles in this investigation.

In opposition to the liberalizing effects of education, religiosity has been strongly connected to conservative

social values. Religions of all denominations have sex role prescriptions, thus, individuals that are very active in religious activity will be likely to hold these more conservative social values, especially as they apply to sex roles. Both males and females revealed positive relationships between involvement in religious activity and personal SROS scores. The point differential between subjects who never attend religious activities and those who attend at least weekly was 36 points. Thus, greater involvement in religious activity is associated with lower (more traditional) personal SROS scores.

The overall results of the influence of family background and personal sex roles appears to be that the distal influences of the family environment are overwhelmed by the current social involvements of the individual. Parental educational levels, maternal employment, divorce and religious denomination were not influential, whereas gender, current educational level, anticipated educational attainment and current religiosity had significant influences. Overall, current social roles appear to be more strongly related to an individual's sex role than family background variables.

Sex Role Stereotype and Sex Role Orientation Ratings

Our perceptions of others are thought to guide our behavior in social situations. In order to process

information efficiently, stereotypes are employed to categorize incoming information quickly. The amount of distortion involved in stereotyping is often questioned. Yet, the distortion of sex role stereotypes has received little attention. Sex role orientations also guide our behavior, especially in social situations that involve impression management for the benefit of a member of the opposite sex. In these situations our behavior is adjusted to meet our perception of expected behavior. The potential outcome of this social situation may very well rest on our ability to accurately glean this expected behavior. Hence, whether sex role stereotypes or sex role orientations are involved, the amount of distortion involved in our perceptions is quite important.

The results of this study indicate that perceptions of sex role stereotypes do not reflect self-rated sex roles. This study also found that males and females rate the female stereotype similarly. However, stereotypical ratings are approximately 13 points away from the female self-rating. Both men and women rate the stereotypical female as more traditional than women view themselves. The 13 point difference is statistically significant, but the practical significance of this difference dims in comparison to the ratings of stereotypical males. Stereotypical ratings of males shows disagreement between men and women. Women rate stereotypical men 14 points lower (more traditional) than

men rate stereotypical men. Yet, jointly, men and women are an average of 48 points away from the male self-rating. Both males and females rate the stereotypical man as incredibly traditional as compared to male self-ratings. This exceptionally strong discrepancy confirms the findings of Borges et al. (1982). Borges et al. found males were rated as more traditional than their self-ratings indicated on all six subscales of the AWS.

The results of this discrepancy are even more serious if the sample employed in this study and the results of Werner and LaRussa (1985) are taken into consideration. College students were employed as the population of interest for this study. Furthermore, the ratings requested by this sample also involved college students. Based on the fact that college students are more liberal than individuals in other social roles (e.g., Swatos & McCauley 1984), these findings are reflective of how strongly ingrained sex roles are, even in a liberal population.

Werner and LaRussa (1985) replicated a 1957 study which requested males and females to rate each other on an adjective checklist. Werner and LaRussa's follow up in 1985 found that males had lost favorable and gained unfavorable adjectives. In sum, the perception of the male sex role stereotype does not reflect the male self-ratings. The male stereotypical ratings reflect traditionalism, even among a

liberal, college student population, and the male sex role stereotype is becoming more negative.

Sex role orientations were hypothesized to differ based on the sex of the rater with females rating sex role orientations as more nontraditional and males rating sex role orientations as more traditional. Since sex role orientations are opinions, inconsistency in this area would be more likely to occur and the literature in the area continues to show no consistent findings (Scher, 1984). The results of this study continue to show the divergence of responses by subjects in regard to male and female sex role orientations. Sex of the rater was not important as hypothesized. Both males and females rated female orientations as less traditional than male orientations. Male and female sex role orientations were also rated lower than self-rated personal sex roles for both sexes. Hence, the conclusion by Shaffer (1985) that recent studies indicate young adults endorse and prefer many of the traditional sex role prescriptions appears to be valid for this sample.

A summary of sex role stereotypes shows that female sex role stereotypes are slightly more traditional than female self-rated sex roles. Male sex role stereotypes are grossly underscored (rated more traditional) by both males and females. Furthermore, females show a larger discrepancy in their ratings of the male stereotypes than do males. Male

and female sex role orientations are rated alike by men and women with female orientations rated less traditionally than male orientations. Thus, men and women not only perceive sex role differences in behavior (stereotypes), they also desire these differences to continue (orientations).

It is additionally important to note the failure of the regression models to predict either sex role stereotype scores or sex role orientation scores for males and females. A possible explanation for this failure as suggested by the regression models is that the underlying processes that generate sex role stereotypes and sex role orientations differs from that of personal sex roles. While personal sex roles are a result of individual life experiences sex role stereotypes and sex role orientations may not be as directly affected.

Sex role stereotypes by definition are oversimplified generalizations of our perceptions. Thus stereotypes are a reflection of sanctioned societal roles, norms and behaviors. Since sex role stereotypes are fairly consistent between individuals they are formed less by personal experience and more by general experiences within a given society. Hence exposure to the media, differences in percentages of males and females in differing occupations and the availability and advertising of sex appropriate items, for example, are experiences encountered by most societal members. Formation of sex role stereotypes based

on these consistent images may then explain the lack of importance of family background variables and self variables as predicted in the regression models. The important processes and variables in sex role stereotype formation are more likely to involve general exposure to societal functioning.

Sex role orientations are not as easily explained. Sex role orientations may be more of a mixture of both societal expectations and personal experience. Sex role orientations are opinions of desired behavior on the part of males and females. Recent societal changes have affected the roles of both males and females. Media presentations moved to a "unisexual" image several years ago. While some individual may have found these changes acceptable based upon their personal experiences and values it is safe to assume others did not. Hence, the degree to which sex role orientations are dominated by general societal experience versus personal experience is likely to vary between individuals. Further exploration in this area is certainly warranted in order to find the specific underlying processes and variables that do affect the development of sex role stereotypes and sex role orientations.

Theoretical Integration

Theoretical frameworks for the area of sex typing deal with the development of personal sex roles. The areas of

sex role stereotypes and sex role orientations are not generally included in this developmental scheme.

Furthermore, the regression models employed in this study support the separation of these three areas since the sex role stereotype and sex role orientation models were not significant. Therefore, this discussion will center on the hypotheses that deal with personal sex role outcomes. The center of the theoretical discussion will revolve around the family background variables and the subject variables.

Several sex typing theories were previously presented. Theories that emphasize early and fairly strong sex typing such as psychoanalytic, cognitive-developmental, and to some degree, social learning, are not appropriate considering the findings of this study. Social-role theory as stated by Eagly (1987) is the most appropriate theoretical framework for encompassing the results of the present study.

The fundamental assumption guiding social-role theory is that "contemporaneous influences arising from adult social roles are more directly relevant to sex differences in adult social behavior than is prior socialization or biology" (p. 9). Thus Eagly believes that the individual's adaptation to current life circumstances and social roles outweighs the childhood influences which are based in the family environment. Eagly goes on to state that social-role theory postulates that society is fundamentally gendered and so men and women are raised with different behavioral

expectations. In general, most men and women conform to these behavioral expectations and so develop different types of attitudes, behaviors, activities and skills. Deaux (1984) echoes this belief by stating that "there is considerable evidence that sex serves as a social category, influencing judgments, explanations for performances, and expectations for behavior" (p. 113). Personal sex roles then are determined by the societally gendered social roles one occupies as well as current gendered behavioral expectation, attitudes and interests.

Past research supports Eagly's (1987) notion that it is conformity to the social role and not conformity to the gender role that determines individual behaviors and attitudes. In the area of family roles, Abrahams, Feldman and Nash (1978) found that sex roles were related to the situational demands of marital and parental status. Even couples that professed egalitarian views were found to conform to traditional sex roles once their status changed to "parent." Spence and Helmreich (1980), and Hetherington and Parke (1986), also echo this sentiment by discussing the changes in sex role behavior across the life span. Thus, changing family roles influence sex role traditionalism.

In the realm of occupational roles, both Eagly and Steffen (1984) and England (1988) found that female sex roles were more dependent on occupational status than on gender status. They found that women that are employed in

more professional occupations rated their sex roles less traditionally. Hoffman and Hurst (1990) found that division of labor resulted in typical sex role stereotyping of subjects, hence again it was the work role and not the sex role that was the cause of the behavior. Thus, while social-role theory is quite new, there appears to be a good amount of support from past research in the areas of family roles and work roles.

The present study also lends support to Eagly's (1987) social-role theory. However, rather than supporting the direct hypotheses regarding social role versus gender role conformity, the present study supports Eagly's initial, underlying assumption which is the basis for social-role theory. As previously stated Eagly's fundamental assumption is that personal sex roles are based on current life situations, expectations, behaviors and social roles. Prior socialization, family background and biology are outweighed or overcome by present life circumstances.

The overwhelming results of this study show that the family background hypotheses (parental education, maternal employment, parental marital status and religious affiliation) are not significant predictors of personal sex roles. Subject variables (sex, current and anticipated educational level, and religiosity) determine in part the individual's personal sex role. Thus while the present study does not compare the importance of an individual's

social roles to an individual's gender role, the study does lend major support to Eagly's fundamental assumption that current life situations and roles outweigh prior socialization experiences.

Problems and Future Directions

There were some problems encountered that were specific to this study, such as the presence of ceiling effects and the difficulties of employing a religious denomination variable. There also were problems that are found more generally in the area of sex role research that need to be addressed. The future direction of sex role research will also be explored with emphasis placed on a greater understanding of the male sex role, inclusion of other subject variables, and a call for further empirical work in the area of social-role theory.

The major problem encountered in this investigation of sex roles was the possible ceiling effect for SROS scores. Orlofsky (1981) had warned researchers of the failure to keep sex role scales up-to-date. An examination of the mean, median and modal scores for each question revealed that a score of 6 was the modal response on 33 of the 36 questions answered by women. The percentage of women in the modal category ranged from 28 to 94%, with an average modal percentage of 67. Therefore, for females most of the 36 questions show the highest level of agreement possible. For

males the modal response of six was found on 27 of the 36 questions, with modal percentages ranging from 24 to 57%. The average modal response indicated a 40% agreement level. Thus, it appears that the SROS is in need of updating so that there will be a greater level of dispersion in scores, especially among females.

Another problem encountered in this study was due to the inclusion of a religious denomination variable. The five categories listed were in all likelihood not specific enough. One respondent marked "Other" as her religious denomination, and then, inserted "Baptist" to qualify her response. Upon coding of this information, the subject's answer was listed under "Protestant" rather than "Other." The categories as presented, then, appeared to confuse some of the subjects. Further, Brinkerhoff and MacKie (1985) suggested that denomination must be clarified in order to separate childhood upbringing from present practice. While many subjects may have been brought up for 18 years in the Catholic church, their affiliation with the Catholic religion may no longer be in effect. Hence, future research should take these problems of definition of religious denomination into account when designing a background informational questionnaire.

Future work should also include other potentially influential independent variables. Since the results of this study demonstrated the importance of current subject

variables versus previously experienced family background variables, additional subject variables should be investigated. One suggestion would be to determine the subject's political affiliation and the degree to which the subject is actively involved in political activities. Another subject variable of potential interest would be the subject's current living arrangements. Areas of comparison could be living in a dormitory, off-campus apartment, fraternity or sorority, or cohabitation. Hopefully additional current social influences such as political affiliation and living arrangements could be demonstrated as influential subject variables when explaining personal sex roles.

The areas of sex role stereotypes and sex role orientations both point to extremely intriguing findings. The exceptional discrepancy between the male sex role stereotype and male self-ratings should be considered appalling. The women's movement of the 1970's helped increase the awareness of female sex roles and the problems associated with the female sex role. In all likelihood, it is the result of this movement that allows males and females to have a fairly good understanding of female sex role stereotypes. Universities offer classes that deal with the psychology of women, but classes on the psychology of men are rare. Past research and the present study all indicate that understanding the male sex role is of importance.

Perhaps the suggestion by Pleck (1981) is of value here. He suggests that future measurement scales need to deal with the possibility that the orientations (and stereotypes) toward men and women are independent. Most scales do not separate these two areas. Hence, Pleck suggests that, "perhaps many individuals who hold modern attitudes toward women nonetheless cling to traditional attitudes toward men" (p. 142). Thus, the perceptual discrepancies of the male sex role need to be addressed in order to facilitate interpersonal interactions and understanding between men and women.

Finally, continued investigation of social-role theory must be undertaken. It is possible to extend social role theory beyond personal sex roles to sex role stereotypes and sex role orientations. In fact, the work of Buckley and Hundleby (1983) tested for situational effects of sex role stereotypes and did find that the sexes were "perceived inconsistently in the different situations" (p. 1251). They concluded that situational experiences were a more important influence than gender in determining appropriate behavioral responses. An emphasis on situational factors rather than personal factors (such as gender) should help society as well as individuals become more flexible and more adaptable. Allowing individuals to choose their social roles, rather than having them preordained by a gendered society is certainly a worthy goal. Social-role theory indicates that

people of both genders are capable of adapting their behavior and attitudes to the demands of roles whether they are work roles, family roles, or age roles, and that sex roles need not be the pervasive, extensive influence that they are perceived to be. Whether the goal is Bem's (1983) gender-aschematic society or simply the better understanding of others, research on sex roles is deemed worthy of further attention.

APPENDIX
SEX-ROLE ORIENTATION SCALE QUESTIONNAIRE

1. It is more important for a wife to help her husband's career than to have a career herself.
2. The idea of young girls participating in Little League baseball competition is ridiculous.
3. The relative amounts of time and energy devoted to a career on the one hand, and to home and family on the other hand, should be determined by one's personal desires and interests rather than by one's sex.
4. It is more important for a woman to keep her figure and dress becomingly than it is for a man.
5. The old saying that "a woman's place is in the home" is still basically true and should remain true.
6. A woman should refrain from being too competitive with men and keep her peace rather than show a man he is wrong.
7. A woman whose job involves contact with the public, e.g., salesperson or teacher, should not continue to work when she is noticeably pregnant.
8. The husband should take primary responsibility for major family decisions, such as the purchase of a home or car.

9. In groups that have both male and female members, it is appropriate that top leadership positions be held by males.
10. Unless it is economically necessary, married women who have school-aged children should not work outside the home.
11. If there are two candidates for a job, one a man and the other a woman, and the woman is slightly better qualified, the job should nevertheless go to the man because he is likely to have a family to support.
12. Marriage is a partnership in which the wife and husband should share the economic responsibility of supporting the family.
13. A woman should not accept a career promotion if it would require her family to move and her husband to find another job.
14. A married woman who chooses not to have children because she prefers to pursue her career should not feel guilty.
15. Unless it is economically necessary, married women who have preschool-age children should not work outside the home.
16. It is generally better to have a man at the head of a department composed of both men and women employees.
17. A husband should not feel uncomfortable if his wife earns a larger salary than he does.

18. It is all right for women to hold local political offices.
19. A male student and a female student are equally qualified for a certain scholarship; it should be awarded to the male student on the grounds that he has greater "career potential."
20. The use of profane or obscene language by a woman is no more objectionable than the same usage by a man.
21. It is certainly acceptable for boys, as well as girls, to play with dolls.
22. Girls should primarily be counseled to enter "feminine" vocations such as nursing, public school teaching, library science, etc.
23. Women should not feel inhibited about competing in any form of athletics.
24. Parents should encourage just as much independence in their daughters as in their sons.
25. Women should be able to compete with men for jobs that have traditionally belonged to men, such as telephone lineman.
26. It is O.K. for a wife to retain her maiden name if she wants to.
27. There is no reason why a woman should not be president of the United States.

28. Career education for boys should have higher priority with parents and teachers than career education for girls.
29. Even though a wife works outside the home, the husband should be the main breadwinner and the wife should have the responsibility for running the household.
30. In elementary school, girls should wear dresses rather than slacks to school.
31. It is acceptable for a woman to become a member of the church clergy.
32. It is acceptable for women to hold important elected political offices in state and national government.
33. It is not a good idea for a husband to stay at home and care for the children while his wife is employed full-time outside the home.
34. The only reason girls need career education is that they may not marry or remain married.
35. There is no particular reason why a man should always offer his seat to a woman who is standing on a crowded bus.
36. Men should be able to compete with women for jobs that have traditionally belonged to women, such as telephone operator.

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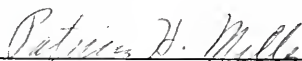
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BIOGRAPHICAL SKETCH

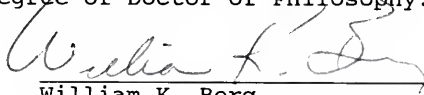
Malia Huchendorf is a faculty member of the Psychology Department at Normandale Community College in Bloomington, Minnesota. The previous four years were spent as a lecturer in the Psychology Department at Illinois State University in Normal, Illinois. Her Bachelor of Science degree was awarded with high honors and with honors in psychology from Illinois State University in 1981. Her Master of Science degree in psychology was awarded from Illinois State University in 1982. She is a member of the American Psychological Association, the Society for Research in Child Development, and the National Council on Family Relations.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.




Patricia H. Miller, Chair
Professor of Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



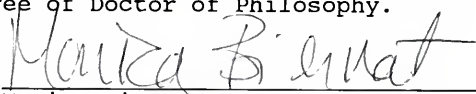
William K. Berg
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Fonda D. Eyer
Assistant Professor of Psychology

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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



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This dissertation was submitted to the Graduate Faculty of the Department of Psychology in the College of Liberal Arts and Sciences and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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